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D. A. Bell

1989-1990

1989

Journal

1990

Catalogue #679-727

Journal

[illegible]

D. A. Bell

1989

Journal

List of localities

California

Oregon, Washington,

British Columbia, Alaska





1989

U.C. Berkeley campus, Berkeley city, Alameda Co., Calif.

January, February, March, April

San Francisco - Oakland Bay Bridge, San Francisco Bay,  
Alameda + San Francisco Cos., Calif.

February,

Pine Canyon, W of Mt. Diablo, Contra Costa Co., Calif.

2 April, 16 April

Mendocino Co., Humboldt Co., Calif.

8 April, 9 April

Preston Ranch, near Moraga city, Contra Costa Co., Calif.

16 April

Moss Landing Wildlife Area, Elkhorn Slough, Monterey Co., Calif.

13 April

Santa Barbara Island, Santa Barbara Co., Calif.

26-27 ~~April~~ April

Red Rock, San Francisco Bay, S.F., Marin, and Contra Costa  
Counties, California.

4 May

Alcatraz Island, San Francisco Bay, S.F. Co., Calif.

5 May

Oregon, Washington, British Columbia and Alaska

22 May - 20 August.





UC Berkeley Campus  
Alameda Co., Calif.

January 10, 1989

09:45 No peregrine on Campanile. Beginning to wonder if he'll ever show up again.

12:30 " "

17:00 " "

January 11, 1989

13:10. Weather: <sup>morning</sup> intermittent cloudy. Cool. Scattered drizzle. <sup>But sunny now, stiff breeze</sup> On Telegraph Ave. near Bancroft. Saw dark form with light vent disappear behind rooftops, headed south across Telegraph Ave. at building-height level. Carla Cicero saw it too - thought accipiter? Large flock of Brewer's Blackbirds (+200) and all pigeons in area scared up & whirling about above the buildings; nearly ringing.

13:20 - Checking Campanile. Over north side, 300' higher, the tiercel Peregrine appeared, nearly "waiting-on" over me in the stiff NE breeze. Sunny sky now. The ~~other~~ cross-low form clear as day, dark tiercel Peregrine! He went into two light stoops, riding the wind down, yet staying in one place, he cut his altitude from a point nearly 300' higher than the Campanile <sup>down</sup> to the level of the Campanile. I was nearly shouting for joy at his appearance. At the close of each stoop he flared, caught himself, then began the next stoop. He seemed to just eat up altitude in slow motion. Once he was down to the



# Field Notes

U. C. Berkeley

January 11, 1989 - cont.

Campanile level, I could see something small & whitish dangling in his feet. The tiercel landed momentarily on N-face ledge #6, then sprung back into the air and circled around in front of the Campanile (N side). He landed after one circle back onto N-face ledge 6, jockeyed prey in his feet, looked around. 13:30 - I went to LSB to get the spotting scope.

13:40. On Evans Hall 10 floor west balcony w/ spotting scope. Observing the tiercel Peregrine on N ledge 6. He has prey in his feet, which is definitely a pigeon. He is plucking the back & remnants of one wing of a brown/white/grey pigeon.

13:50 - Tiercel working over a pigeon wing.

13:58 - Tiercel swallowed one pigeon foot (tarsus) whole. Noticed that the pigeon has grey shoulders.

14:00 - The tiercel was interrupted in eating when the bells of the Campanile rang the hour. The tiercel stopping picking at the pigeon, just stood there, looking about for roughly a minute (prior to this he had been eating constantly, pausing only every few bites to look over his shoulder. I should note the peregrine almost invariably sat with his back facing out from the Campanile, or at some angle to the shelf so that his tail cleared the shelves of the Campanile.







U.C. Berkeley

January 11, 1989 - Cont

14:01 No head on pigeon, upper breast nearly entirely plucked, one wing left with only a few secondaries on it. I believe the peregrine had already eaten a meal off this pigeon, and that he had just carried it to the campanile this afternoon.

Especially because the pigeon appeared ~~so small~~ to be small prey in the peregrine's clutches when it was "waiting on" over the tower. Normally, pigeons are a lot more noticeable, and appear to "weigh" the peregrine down much more when they are whole/freshly caught.

14:05. Trained eating intestines

14:20 - End of observation. Peregrine still on ledge 6, N face, eating.

18:40 - Peregrine on W ledge #3 - sitting, foot tucked.

22:00 - No Peregrine on Campanile.

January 12, 1989

10:00 - No peregrine

January 14, 1989

12:45 - 13:15 Peregrine resting on E ledge #3 of Campanile. Went up to 10th floor of Evans to observe. Weather cool, sunny.

January 15, 1989

15:00 - Peregrine on NW corner of N ledge 3 of Campanile. Sitting. Weather: foggy morning, cool, sunny afternoon.





# Field Notes

U.C. Berkeley

January 17, 1989

09:30 No Peregrine on Campanile.

15:45 - 16:30. Peregrine on W. ledge #2; ran across from N  $\rightarrow$  S along the ledge, actively looking about. I thought he might go off on a hunting sortie so I went up to 10th floor Evans Hall balcony, but the tiercel, who was out of direct view on the W face of the Campanile, never left the tower.

17:30 - Tiercel Peregrine still on W face ledge #2.  
Right foot tucked.

January 18, 1989

10:00 - Tiercel Peregrine on ledge #2, W face of Campanile, sitting w/ left foot tucked. Right now the W & N face of the tower are still in shade from the sun. Weather clear, warm, sunny.

17:30 - Tiercel P. still on ledge #2, W face.

22:15 - Tiercel P. still on ledge #2, W face.

Head is not tucked under wing.

January 19, 1989

13:30 - No Peregrine on Campanile.

17:30 - " "

January 20, 1989


Inaugural speech of Pres. George Bush  $\rightarrow$  urging unity of Executive & Congressional Offices! .....

10:30 - Peregrine on NE corner of E face of Campanile, ledge #2. Sitting very straight, erect.

13:45 - 14:00 Peregrine on NE corner of N face, ledge #2. Sitting very erect.



U.C. Berkeley

January 20, 1989


15:45 - 16:38: Peregrine on N ledge #1. From 15:45 - 16:00 he sat rather erect, with rt. foot tucked, viewing all the goings-on about him. ~~at 16:00 he walked in~~ Nice views of his breast & face, as he was angled towards me (I was on the 10th floor computer building). Creamy throat. at 16:00 he walked to the NW corner of ledge #2. He seemed to be very observant, looking every which way, following feathers floating up in the sky, doves flying past the Campanile, etc. At times he looked ready to hunt, flattening his body, bobbing his head. I kept thinking he would launch off his perch at any moment.

16:00 - 16:15 - Extremely alert, looking about. Warbled his right wing & foot twice - very alert. The sun shone through his creamy vent feathers. Warm, hazy day. Beautiful dark falcon, light ~~feathers~~ rear of tarsi highlighted by the sun.

16:15 - 16:38 - He moved farther around to west face of ledge 1. Calmed down, foot (rt) tucked again, less anxious.

January 23, 1989

Rain last night; cool, changeable weather today.

10:30. No peregrine.

08:15. John Tackett saw the Peregrine sitting on ledge of NW corner of Campanile.





U.C. Berkeley

January 23, 1989 - con't.

13:00 Peregrine sitting on E ledge #2. Erect, foot tucked. Sunny, & cool day. Peregrine is shaded on his ledge.

17:15 - 17:30. Peregrine sitting on E ledge #2 - erect.

Full crop, right foot tucked (viewing from Evans 10th floor W balcony). After sunset. at 17:25 the tiercel launched off his ledge, flew around behind the Campanile (S side - out of view) and flapped up to the W ledge #2. Landed out of view. But I could see him still sitting there ~~from now~~ on the Campanile from the Earth Sci. Building on my way home.

21:45 - No Peregrine on Campanile.

January 24, 1989

Sunny, clear, cool.

10:00 Peregrine on ledge #2, N face of Campanile. Erect posture.

13:00 Peregrine on ledge #2, N face.

13:15. Peregrine ~~on~~ flew off of ledge #2, N face, curved around to ledge #2 E face. Both ledges in shade.

January 25, 1989

13:10. No peregrine on campanile.

13:30

"

"

January 26, 1989

09:00

~~12:00 - 13:00~~ - Peregrine sitting on W face ledge #2.

12:00 - 13:00 - Peregrine sitting on W face ledge 2, but



# Field Notes

U. C. Berkeley

January 26, 1989 - cont

on the very NW corner. Bob Jones & I walked from LSB up to Campanile. Could see the falcon's breast just exposed to the sun - the sun shined off it like a beacon. Very creamy in color. Bob & I went up to Evans 10 floor balcony. Watched the falcon. He warbled twice, (stretching wings). Looked about much of the time, but by and large he had a relaxed appearance. At 12:30 he lashed up out of the sun, sitting with foot tucked (left foot) on NW corner.

15:00 - Peregrine on N face ledge #2.

17:30 - No Peregrine on Campanile.

January 27, 1989

10:00 Peregrine on N face, ledge #2. Erect, quiet in appearance. Air almost beginning to waver about him - he seems much too sessile over the past 3 days.

12:00 - 13:00. Peregrine ~~off~~ on N face ledge #2.

Inactive, sitting on left foot.

15:00. Peregrine on E face ledge #2, NE corner. Surveying surroundings. Facing somewhat N. Foot tucked. May have half a crop.

January 28, 1989

14:00 No Peregrine on Campanile

January 29, 1989

12:00 - 13:00 Peregrine sitting on ledge #4, N face.

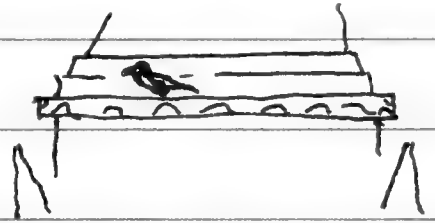
Windy (~20 mph); warm, sunny. The falcon is



U. C. Berkeley

January 29, 1989

sitting parallel to the ledge:  
with nearly hunched up shoulders.



Appears to have about a half-crop, or at least a partial crop. Somewhat facing into NE wind. The falcon did not move an inch in over an hour. Although it is looking about.

January 30, 1989

2-2221

08:00

Met Jeff Davis at the Campanile. He let me onto the Widow's Walk. The door opens out on the E side of the Campanile. I had seen the peregrine sitting on the NW corner of ledge #2, N face, from down below. I discovered that one needs to lean out a bit in order to see ledges 2+3, because the stucco ledge #4 blocks these. I was able to collect pigeon remains from the E + S sides, without disturbing the falcon. I then went to the NE corner of W. dow's Walk, leaned out, saw the falcon's head, who immediately launched out from his perch. Began screaming a deep kek-kek-kek-kek. The bird, from close up, almost looks big enough to be a female. I took many pictures as it circled around in front of the Campanile, to the W + N. It kept coming back up very close, slightly above me, making agitated kek-kek calls. The falcon must have made about 8-10 close passes, sometimes coming in from a





U. C. Berkeley

January 30, 1989 - cont.

wide sweep of the area. He seemed to just eat up space - in one instant he was over the Computer Building, the next over me on the Campanile. After about 1-2 min. the falcon disappeared. I think next time it would be best to make lots of noise as soon as one opens the door to the Widow's Walk, so as to alert the falcon to one's presence (perhaps whistle loudly). That way, the bird won't be so alarmed by the first sight of a human. All in all - collected the remains of at least 8 pigeons. Most banded. <sup>PS - Peregrine had at least 1/2 crop.</sup>

12:15. Peregrine on N ledge #1. Erect.

13:15. Peregrine ~~off~~ on NW ledge #2 - sitting very erect. Gorgeous.

16:45. Peregrine on NW ledge #2. Apparent fresh dead pigeon on ledge #4, N face. Looks rather whole. Maybe the falcon was so pissed at my presence on the widow's walk that he had to vent his anger on a pigeon. This morning the falcon had at least a partial crop - and I did clean up all the pigeons in the campanile, so he must have knocked this one bird down sometime in the afternoon (after 13:15).

January 31, 1989

10:00 : Peregrine on ledge #2, N face. No pigeon visible on this ledge. Falcon looks like he has a good crop.



U.C. Berkeley

January 31, 1989

10:30 - John Trickett saw, from the 3rd floor Biolibrary window, the peregrine flying east from LSB to Campanile, carrying a large prey item in its talons. The falcon did not stop at the Campanile, but continued on.

15:00 - Matt Nixon & Lee Aulman from U.C. Santa Cruz Predatory Bird Research Group stopped in at MVZ. I took them up to the Campanile right away - no peregrine. Weather is cold & getting cooler. Scattered clouds. We went back to MVZ - I showed them around.

They were delighted to see everything. Lee was particularly interested in the Condors, Matt in the Aplomados.

~~At 17~~ Matt was surprised about ~~our~~ Aplomado Falcon series - to see such variation. All the birds the UC group has have a dark creamy tan/rusty breast, clean, no markings.

17:15 - We went back to the Campanile. No falcon.

February 1, 1989

08:45 - Drove to Campanile w/ Matt & Lee. Saw the falcon sitting on the South Side, shelf #2. Quite relaxed, flanked feathers very fluffed out. Matt & Lee have the impression that the ~~falcon~~<sup>falcon</sup> is large. But they are not certain either. Still, beginning to think it is indeed a female. We watched the bird for about 15 minutes.



SF-O Bay Bridge, San Francisco Co., Calif.

February 1, 1989

Drove with Matt and Lee across the Bay Bridge to the Caltrans station in San Francisco. Met the bridge engineers and a couple employees (Duke - a mean, older, strapping fellow, and Jay Pedersen, a younger guy who, of all things, breeds African Grey Parrots + Cockatoos at home). Matt + Lee want to place gravel in some of the holes on the bridge which the Peregrines have used for nesting. The bridge people gave us each a set of coveralls, ~~soft~~ safety harness, helmet + orange vest. We hopped into the Peregrine Funds Pick-up, and followed the two bridge people in their vehicle. As always, ~~the~~ one of the lanes on the lower deck had been blocked off for bridge maintenance. We drove out to the first tower on the SF side. Matt + Lee went down below the lower deck to check out the next hole, but couldn't get to it without ropes. So, we went on to the central anchorage of the bridge - the large cement pillar in the middle of the suspension bridge. This is where the falcons attempted unsuccessfully to nest last year, the P.Fund removed broken egg-shell fragments last spring. After which, unbeknownst to everyone, the falcons re-nested on the W side of the tower closest to SF, in a hole beneath lower deck. From that spot a young falcon fledged, was picked up by SF fire dept at their boat station below the bridge, given to SF Zoo who gave it to the Peregrine



SF-O Bay Bridge, S.F. Co., Calif.

February 1, 1989 - cont.

Find. Lee Aulman hacked this falcon out successfully on Catalina Island in So. Calif. One further egg was removed from that nest, and it turned out to be one of the cleanest eggs in Calif. Anyway - we stopped at the east side of the anchorage and climbed over the side down to the catwalk that parallels the east side of the anchorage just below the lower deck. It was nearly as scary as I thought it would be. The ladders & catwalks all had excellent hand holds, etc. Matt & Lee moved over to the hole, and saw the falcon come out of it. Suddenly both peregrines were moving around. They screamed at first, then were silent, just cruising back and forth below and alongside the bridge. I went out to the edge of the anchorage and got some good pictures of them as they passed alongside the bridge. The sky was overcast/variable, but clear under the clouds. Beautiful view of SF. The falcons were just gorgeous - they would pass below us under the bridge - blue-backs contrasting with the sea-green color of the bay's water. Matt, Lee & Duke were busy putting gravel into the hole. Duke (the mean looking guy) really got into it. The nest platform consists of a long, flat steel box formed by top & bottom steel plates which span two cross beams that come into the pillar at this point. There are four large (1' x 2') openings to the box: two face out from the pillar



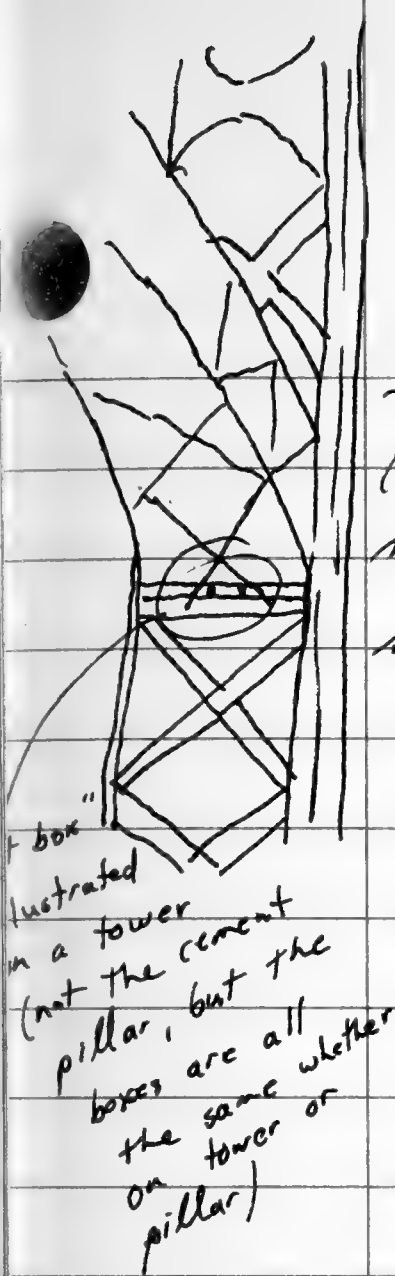


S.F.-O. Bay Bridge, SF Co., Calif.  
U.C. Berkeley, Alameda Co., Calif.

February 1, 1989 - cont.

(in this case, due east) and 2 are at the sides. This arrangement is visible on either side of all towers on the suspension-portion of the Bay Bridge, including the central cement anchorage, where the falcons seem to be located again this year. There were no eggs yet in the box. So they spread a nice layer of gravel throughout. I was surprised at all the beams underneath the bridge. There seemed to be lots of places for the falcons, and more importantly, offspring to sit (if only they can survive that initial jump "out going into the drink"). As we were leaving the nest box both falcons flew up and landed on beams not too far away - just staring at us. Beautiful adult falcons. The male appears to have a ~~thinner~~ thicker, darker cap, thick malar stripe. <sup>Both birds clean, quite whiteish on breast.</sup> Their dark, penetrating eyes observed us. We left them. The whole operation took less than an hour.

By 11:50 we were back in Berkeley, standing at the Campanile. I was just about to go to a seminar when the peregrine flew in from the east & landed on the NE corner of ledge #2. We immediately went up to the 10th floor balcony of Evans Hall - set the scope on "her." Got a good look. Alleviated Matt of his thoughts that she might be a sub-adult. Lee thought her tail tips looked fairly worn. I was continually struck by her very uniform chocolate back





U.C. Berkeley

February 1, 1989 - cont.

We had the scope on her not more than 5 minutes when she began "e-chuck"ing. We couldn't believe it. Scanning the skies we were all excited. The falcon took off & headed off the SE. at about the level of the hills, behind the I-House, a smaller falcon came stooping down out of the clouds! Matt thought he saw a "silver" appearance to it - which may suggest it's an adult. Next to our Berkeley falcon, it appeared much smaller. all in all, I really think this Berkeley falcon is a ♀ based on 1) size to the other bird - also having just seen the pair on the bridge 2) voice - deep, throaty 3) behavior - "echucking" to the male. The two peregrines continued to circle about one another and make shallow stoops, usually the male would get above her then do a long shallow but fast dive on her, a couple times it looked like she rolled to greet him with her feet. They got really low at someone's house in the hills behind I-house, then began climbing & wheeling in the clouds in the direction of Chasemont, then Piedmont. We lost sight of them after about 4 minutes, they had drifted way south, lost in the clouds at about the level of Oakland. just fantastic. We were quite jazzed. Is this the start of something. Did the travel entice her to Oakland? Is this the travel of a pair that supposedly hung around the



U.C. Berkeley

February 1, 1989 - cont.

Oakland AT&T building (Franklin + 15th) for the 1987 season?

We drove back to SF to meet the bridge observer at the fire station below the bridge. Talked with him from 15:30 → on. At 17:00 a Peregrine appeared over the closest tower. Up high, soaring with gulls. It drifted over the Ferry Building, then put in a powered dive at a small bird about 100 feet up over the bay. Missed it, then drifted back over the bridge (100 above the tower!), shallower dive at a gull which had dived on it, then back over downtown Ferry Building, then back to land at the very top of the closest tower. Did not see it fly off again. I left after sunset. Very cold (Alaska air coming in). What a ~~#~~ satisfying day!





U.C. Berkeley

February 2, 1989

10:00 am - No Peregrine. Cool. Broken sky, changeable weather.

13:00 - No Peregrine.

15:15 - No Peregrine

17:30 - No Peregrine on Campanile.

February 3, 1989

Rain last night:

0815 - John Trochet saw Peregrine sitting on W ledge of Campanile.

10:00 - I saw Peregrine sitting on SE corner, ledge #2 erect, foot tucked, light drizzle.

12:40 - 13:05 Peregrine on E ledge #2, middle.

Break in drizzle; few, scattered droplets. Peregrine carefully preening herself, around vent region, and rump.

13:05 - Peregrine took off, flew in direct level flight due east.

17:30 - Walking up to Campanile. Just I was up to it the ♀ Peregrine appeared flying out of the east, about 50' above the tower. She began screaming a keck-keck-keck several times. Carrying a pigeon. She continued past the tower, over me, due west and lost sight of her. I don't know why she was so upset. I walked around the tower, didn't see anything wrong. Went up to 10 floor Evans, watched. Saw nothing, except for a light in the bell tower. This seemed unusual, so



U. C. Berkeley

February 3, 1989 cont.

maybe it disturbed her. Stayed up till 18:15, scanning rooftops for the falcon, but couldn't see her. Did possibly the ad. male somehow disturb her?

No sign of him though.

February 4, 1989

16:00 - No falcon on Campanile. Weather cold, clear.

February 6, 1989

Weather clear, but very cold. Strong NE wind (15-25 mph gusts)

10:00 - Falcon on Campanile, relaxed, on W ledge

#2, in shade. One foot tucked.

12:00 - 13:00 - Falcon still on W ledge #2, relaxed, at times moving to parallel to ledge. Now in sun; windy.

15:00 - Peregrine not on W ledge.

16:00 - 17:30 - Peregrine on W ledge #2, sitting.

Visible in fading rays of sunset.

February 7, 1989

Clear, cold, dry. NE wind.

10:00

12:45

} No Peregrine on N & W ledges

16:15 - No Peregrine on Campanile.

February 8, 1989

09:00 - Saw the Peregrine flying north, over our house on 1567 Scenic Ave., in Berkeley (<sup>was in our</sup> I <sup>looking</sup> kitchen, eating, <sup>out the window</sup> I looked up & saw the falcon flapping hard ~~into~~ the ~~stuff~~ and moving fast with the strong (~15 mph) SE wind.



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U.C. Berkeley

February 8, 1989 - cont.

09:45 - A check of the Campanile revealed no peregrine.

12:00 - No falcon on W & S. faces of Campanile

14:30 - No falcon on Campanile; rain has set in.

17:30 - No falcon on Campanile; rain.

February 9, 1989

13:00 - Rain, SE winds - mild. No falcon on Campanile.

17:30 - Clearing skies, beautiful sunset. No Peregrine.

February 10, 1989

11:00 - Not as cold as in the past weeks. Hazy, light fog. Sunny. No Peregrine on Campanile.

~~11~~ 16:00 - No Peregrine.February 11, 1989

14:00 - No Peregrine. Weather warm, sunny, hazy.

16:00 - No Peregrine.

February 13, 1989

10:00 - No Peregrine

12:00 - " "

17:30 - " "

February 14, 1989

10:00 - No Peregrine.

12:00 - " "

15:00 - " "

17:20 - " "

February 15, 1989

10:00 - No Peregrine

18:00 - " "



U. C. Berkeley

February 16, 1989

16:30 - No Peregrine. Warm day.

February 17, 1989

Margarett (Pest Services) called Bob this morning to tell him the Peregrine is back on the Campanile.

11:00: I saw the Peregrine sitting on N~~W~~E ledge #2 as I approached Evans Hall. The falcon flew off the tower heading due west in a "butterfly"-like slow flight. About 1 min. later it reappeared from the East(!), landed back on NE ledge 2.Went up to 10th floor Evans - watched the falcon. She's actively looking about, ~~Back to~~ over her shoulder, as her back faces out from the tower. She nevertheless looks relaxed.

It's funny, but the weather since I last saw the falcon (Feb. 8) has been pretty warm, almost balmy. Today the weather is again warm, but hazy. Visibility &lt; 2 miles.

February 18, 1989

Light drizzle, intermittent. Maren saw the falcon sitting on shelf on east side of Campanile around

17:00:

I checked the Campanile at 21:00, no falcon; ~~over~~ clouds clearing.February 19, 1989

15:00 - 15:30. Today started with clearing weather. Quite sunny by late morning. Slight S wind. Few high clouds. Went to 10th floor Evans. Watched the Peregrine sitting





U. C. Berkeley

February 19, 1989

on ledge 2, E face of Campanile. The falcon is actively looking about, but is quite relaxed. Right foot tucked. She has a full crop.

February 20, 1989

09:30 - No peregrine on Campanile.

13:00 - " "

16:00 - " "

17:30 - " "

Weather, warm, hazy, calm. Very high thin cloud layer too.

February 22, 1989

10:00 - No Peregrine on Campanile.

11:30 - " "

Weather cooler, calm, some fog, mist around noon. No sun.

17:30 - No Peregrine.

February 23, 1989

9:00 - No Peregrine

11:00 - No Peregrine.

17:30 - No Peregrine.

Weather - thin high overcast.

February 24, 1989

9:30 - No Peregrine. Weather thin high overcast, calm, cool.

17:30 - No Peregrine

February 28, 1989

Weather cooling, but still sunny.

h

# Field Notes

Doug Bell

U. C. Berkeley

February 28, 1989 - cont.

10:00 - No Peregrine on Campanile.

16:00 - "

18:00 - "

~~February~~ March 1, 1989

Weather → thickening overcast, cold. No sun.

10:00 - No Peregrine on Campanile.

March 2, 1989

11:45 - No Peregrine on Campanile.

17:30 - "

March 3, 1989

12:00

~~10:00~~ - No Peregrine on Campanile.

18:00 - "

March 4, 1989

13:00 - No Peregrine on Campanile

March 6, 1989

17:30 - No Peregrine on Campanile

March 7, 1989

10:00 - No Peregrine.

March 10, 1989

13:00 - No Peregrine.

March 14, 1989

10:00 - No Peregrine. Warm, sunny weather.

April 6, 1989

Have not seen the Peregrine since Feb. 19, 1989.

Went to Campanile today, still no sign.  
Bell remains.



Pine Canyon, Contra Costa Co., Calif.

April 2, 1989

Pit Sander and I hiked up through Pine Canyon, from Castle Rock Park all the way to the upper reservoir, beyond the power lines and rock areas.

Gary Beeman had told me that he <sup>+ Bill Swearingen</sup> saw Prairie Falcons on one of the smaller rocks on March 19, 1989; and saw them incubating in a pot hole on April 1, 1989.

He told me the birds were on a rock due east from the horse-gate. Pit and I hiked up the canyon, stopping to scan all the rocks along the way. As usual, there was lots of human activity: hikers, horseback riders, mountain bikers. Several groups of people walking up about the cliffs too. The first long cliff face, as one hikes up the canyon, is the one that had Peregrines on it in the 40's. This rock is pictured in the 1985 Peregrine book. This rock also gets a lot of human activity. There is a smaller rock with a large cavern just in front of this old peregrine rock. Still further up the canyon is the big, deep, thick rock. It is massive, but relatively low in the canyon. The old stick nest appears to have been added on, as it now reaches nearly to the top of its crevasse. Up from this massive rock are two more ~~large~~ medium-size formations - one with a pinnacle on top of it. Still further up the canyon are a couple smaller rocks and then, on a slight bulge, is a small rock formation jutting out from chaparral. It



## Peregrine Kills - Campanile, U.C. Berkeley

6 April 1989

1. Keel, shoulder girdle, left wing: Standard pigeon.
2. Pigeon pelvis - half.
3. Pigeon leg - right.
4. Pigeon leg - left.
5. Pigeon leg & piece of left pelvis.
6. Pigeon wings & shoulder girdles: Buff-brown/rust  
Coverts & Secondaries, white primaries; plus  
Rust/buff colored pigeon head.
7. Pair of pigeon legs - light colored pigeon  
Banded NBRC-88 - CC 194
8. Pigeon gizzard
9. Pigeon gizzard.

10 November 1988

1. Pigeon gizzard
2. Pigeon gizzard
3. Pigeon gizzard
4. Pigeon wing feather: Rust & white P's
5. Pigeon wing feather: Gray & white P's
6. Pigeon wing feather: Normal race
7. Pigeon head white
8. Pigeon head dark.
9. Pigeon gizzard.
10. Small bird breast bone (blackbird-size)
11. Small bird breast bone " "
12. Red-shafted Flicker primaries.
13. 5 pellets - dark feathers & seeds in 3 pellets
14. 4 pellets - light feathers & seeds → in 2 pellets
15. 1 pigeon head → Rust brown head.

16. Pigeon ~~leg~~ leg - light hind. Band No. <sup>2 NP</sup> ~~NP~~ A 88 RA 5980
17. Burrowing Owl: 2 legs + bill.

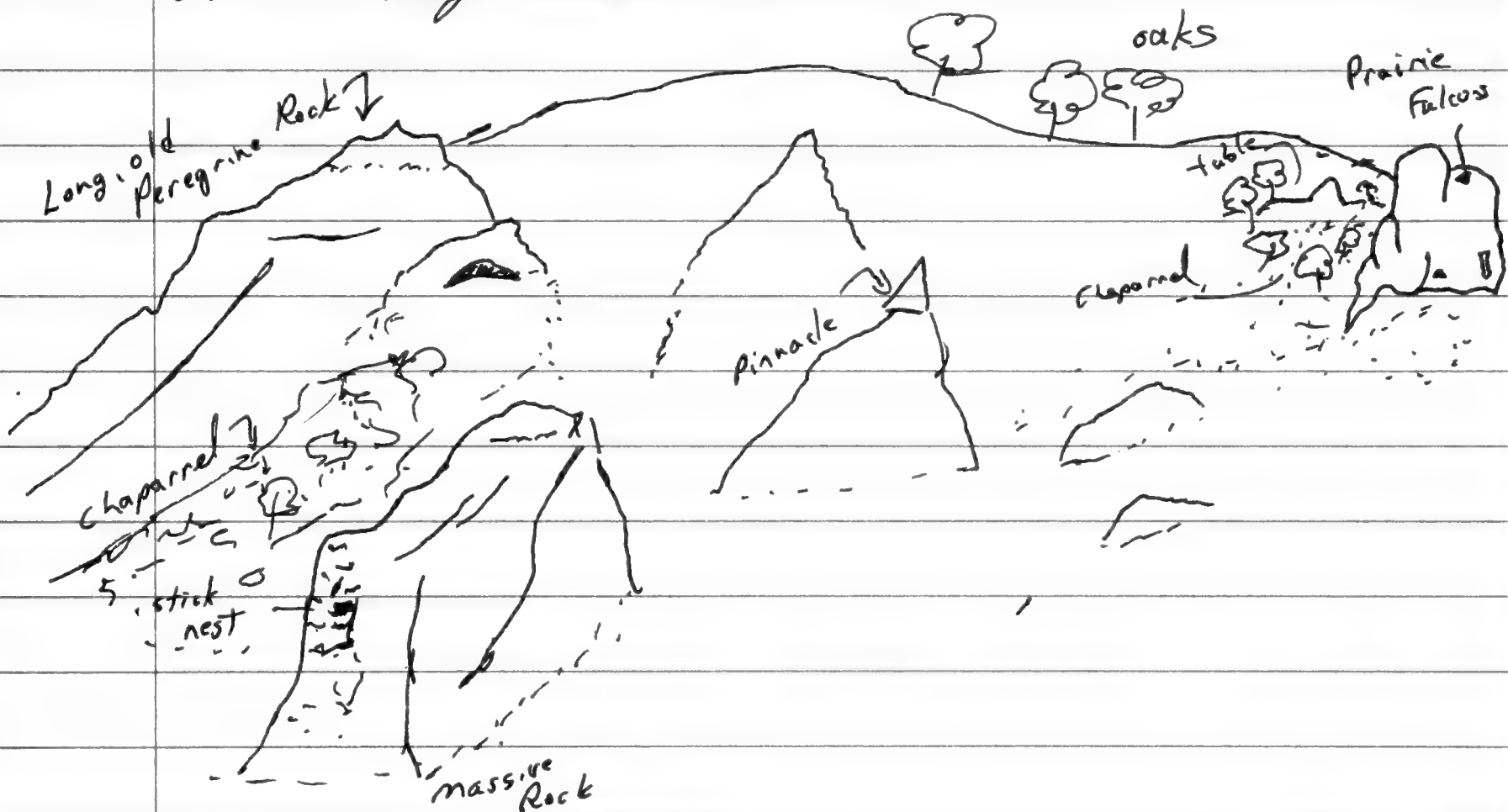
30 January 1989

1. Pigeon shoulder girdle + wings: Buff wrists, white P's.
2. Pigeon wings: Black wrists, 5°; White primaries
3. Pigeon wings: Normal colour.
4. Pigeon wings: Normal color
5. Pigeon wings & shoulder girdle: Buff throat.
6. Pigeon wing & shoulder girdle: Buff ~~throat~~ throat.
7. Pigeon wings + pelvis + breast + shoulder girdle.  
Black shoulder, wrists, white Primaries Band: NBRC 88  
J761
8. Black pigeon head.
9. Pigeon leg - right
10. Pigeon leg - DJO 87 815
11. Pair pigeon legs NP A 88 BY 19
12. Pigeon pelvis + left leg
13. Pigeon leg - left.
14. 8 pellets → light feathers.
15. 7 pigeon gizzards seeds in 5 gizzards.



April 2, 1989

is probably not more than 50' in height in front, and behind it is about 10' to its top. Further up the hill from it is another small rock with a flat "table". The prairie falcons are in a pothole in the 50' rock, at its very crest.



The pothole is less than 5' from top of rock. Anyway, Pat & I walked up the entire canyon to the reservoir, coots & 1 pr. Mallards on water. Then we hiked back down to the horse gate, and hiked up the ridge (Pine Ridge) west of Pine Canyon. Sat & ate lunch, ~~at~~ watched the second-to-last set of rocks on the opposite hillside. Saw nothing but ~~the~~ turkey vultures (>20), red-tails (±5), and white-throated Swifts. After ca. 1.5 hours we



April 2, 1989

began hiking back down the canyon, thinking it was without Prairies. As we entered the meadow, a large flat area in the canyon about in the middle of the rocky area, I heard falcons screaming. We looked up, and I saw two Prairie Falcons flying about. One then flew in to the pothole, and disappeared into it. We excitedly hiked up Pine Ridge, and, as we climbed higher, we could view the falcon incubating. She peered out of the hole. In the course of our hike to the top of the ridge we often stopped to view her. We could see directly into the hole, about  $\frac{1}{4}$  mile away. The falcon occasionally turned the eggs & resettled. At one point a hiker hopped up on the table rock, but that did not seem to disturb the falcon. She could not see that rock because it was behind her. We had just seen the tiered fly past and scream, but he did not return to harass the hiker. At this time there were about 10 different people up on the rocks, including 3 loud & drunken teenage boys. Most the people were scrambling about the large rocks to the north west of the Prairie Falcon rock. A couple times we saw the tiered fly right past people without being bothered. At one time the falcon came off the ledge to greet the tiered, and it looked like a very small food item was exchanged. The



April 2, 1989

falcon flew right back to the pit hole, swallowed the item, then walked over to her eggs + settled. From our vantage on Pine Ridge we could see the cancerous growth of Concord + Walnut Creek to the north, new houses being built on a ridge to the west (from Danville), and a few houses to the south from Diablo + Blackhawk. It is unbelievable that prairie Falcons are nesting in Pine Canyon. In addition, the Park Superintendent, Mr. Felix Arteaga, + Gary Beerman, said Prairies are on Blackhawk too.



Mendocino Co., Humboldt Co., Calif.

April 8, 1989

Berkeley, CA → So. Humboldt Co., CA.

Left Berkeley at about 12:30. Very hot day - 80°. Arrived at Squaw Rock, Mendocino Co. 14:30. Hot sunny. The new road out of Cloverdale ends approx. 1 mile so. of Squaw Rock.

Met a fellow from S.F. - Mr. Nick Wheeler - who was watching the rock for peregrines. He said he had just seen the male come swooting by out of the north. The falcon (♀) came off the rock, screaming. She met the tiercel, then flew up to an old Red-tail stick nest at the upper left section of the cliff. The tiercel peregrine flew off south down the Russian River. Meanwhile, Mr. Wheeler could not tell if the falcon had laid down in the stick nest, or flown off elsewhere on the cliff. At any rate, there was no food transfer. I watched the rock for about 20 min, then had to go. Did not see any falcons - but there were several spots with lots of whitewash - mostly perching spots. The long shelf about 2/3 up the main face appears to be shorter in length. Some whitewash visible off to the right of some piled up flat rocks. Did Monte's group put the rocks there for shelf improvement? The ravens nest is active again - saw at least 1 one bird on the nest - coal black, eyes blinking. The nest has grown in depth - the birds might be running out of building space! Russian River looked healthy - foamy light green. Arrived in Garberville at around 17:10. Very hot. Brown's Sporting Goods has a Barretta 12-G. side-by-side for \$299. Looks in good shape. Arrived at the Buiceland Peregrine office by 17:30. Nice

View of  
Brizeland ledge  
from nail boxes



Pothole from  
1988



Where birds seen  
to switch places -  
1989



Humboldt Co., Calif.

April 8, 1989 - cont

view, & in sun most of the rock. After a couple minutes a fellow drove by & stopped - Mr. Willie Bosco - he asked if I had seen the birds. All of a sudden we saw a falcon fly in from the south across the cliff face & land in a snag up off to the left. It looked like a "heavy bird," with yellowish feet, thick cap & very lean breast & belly. Very whitish w/ at most faint hints of faded, pencil thin black barring on lower breast. It had a full crop. I looked over the cliff - it looks like the pothole from last year has a spider web glistening across it. Also, funny white stick in right hand corner of the pot hole. Just the falcon flew back to the cliff. Scurrying heard, also c-chacking. The falcon landed on a small tussock at lower right corner of a big pothole - crevasse complex to the right of last year's pothole. One bird came out from deep to the right of the large crevasse, flew off & up to snag on right of cliff. The other falcon, that had just landed on the tussock, hopped behind it, appeared to nibble at something for about a minute, and then walked to the back of the crevasse. Meanwhile, the "relieved bird" was on its snag, preening. Might be the tiercel - but it had definite malar stripe, was more colorful than the other bird; had well defined horizontal black barring on flanks, many black teardrops on belly, pinkish breast, and orange yellow cere & legs. I just could not tell from the size if it was male or female. It flew off south, but then came back about 10 min later to land in a snag. Mr. Bosco said he saw both falcons engaged in aerial



Humboldt Co., Calif.

April 8, 1989 - cont.

courtship last week. It sure looks now like they are incubating. Pam & Todd drove past while I was talking to Bosco. Drove up to Pam & Todd's ranch. At Goat Rock by 18:30. No sign of any falcons, but there is a big white goat on the rock. Flock of 15 Ravens on pasture near Benlow's house. Lots of meadowlarks. Grass is green, short, very lean. The main pothole on Goat Rock has a healthy patch of grass right in the middle of it. The left corner of the face of the pothole looks different - it might have chipped off a section. Weather is cool, light breeze. Just wisps of high clouds. 20:10 - heard short scream of falcon as I left, but did not see anything.

April 9, 1989

08:30 - at Goat Rock observation point, Phelps Ranch, Humboldt County. Heard high-pitched screaming, short duration. A peregrine is sitting on large snag at top right of rock. In full sunlight: dark blue/black cap, thick malar ~~to~~ but noticeable white near auriculars. Whole breast & belly appears very white. Fine belly & flank markings are yellow. Very neat, compact appearance - tiercel? Weather is still, hot.

08:48 - Tiercel still on high snag. Heard wail - from its mate?

08:50 - Tiercel (?) off snag, flew out in my direction - quick wing-beats - really looks like tiercel. He circled over my observation hill. Wailing heard coming from rock - possibly ♀ begging for food? Telling ♂ to go

A hand-drawn map of a field site. The map shows a shoreline with several features labeled. On the left, a small pothole is labeled 'Small pothole I checked in 88. Scrape.' with an arrow pointing to it. Below this, a cluster of trees is labeled 'Lower snag trees' with an arrow. In the center, a larger pothole is labeled 'Pothole where female is' with an arrow. To the right of this pothole, a shelf area is labeled 'Shelf w/ lots of'. Further right, a pothole overhang is labeled 'Pothole overhang' with an arrow. To the right of the overhang, a cave is labeled 'Cave' with an arrow. On the far right, another cave is labeled 'Cave' with an arrow. The map is drawn with simple lines and includes some scribbles representing vegetation or rocks.

Lower snag tree

Humboldt Co., Calif.

April 9, 1984

out & hunt? The wailing varies greatly in pitch - maybe the falcon is not in a pothole, sounds as if it's sitting in a snag. Incessant wailing over 2 minutes. 09:00 - just saw a peregrine fly up into lower tree on right of cliff - same level as pothole. Sat for a minute, then flew back across rock & out over ridge to SW. 09:00 - 09:30 - No peregrine activity whatsoever. 09:46 - still no activity. Todd is coming down, so maybe we'll climb the rock now.

10:00 - 11:00; Climbed down into large pothole. As we approached rock ledge from above saw tiercel first - he screamed weakly, circled about in front of rock. Then the falcon (♀) got up. Todd thinks she launched off from a tree on right of rock, near their favorite perching spots. The birds did not scream much. Todd recorded them. No defense as I climbed into the pothole - Pothole is very clean - no scrape to speak of, few footprints, one or two whitewash marks. Possible ~~rat~~ tail signs. Tail sign of a rodent. Only after I was at base of rock, coming around to the left of it did I hear the female give her loud, raspy lek-lek-lek. I don't know what to think. Either 1) the falcons are using another pothole or 2) they didn't lay this year. Judging from behavior so far, I think it's #2.

11:00 - 12:00. No sign of Peregrines.

13:50 - 14:15. No sign of Peregrines. Then suddenly heard screaming. Saw tiercel fly up to snag on ~~lower~~ right of cliff - low. Heard e-chucking, then wail of ♀. She appeared at pothole on right side of rock, just at the left upper corner of the huge overhang (see diagram). She sat on



Humboldt Co., Mendocino Co., Calif.

April 9, 1989

the ledge to the pothole for about 10 min. Alternately whistling & e-chucking every 30 sec. or so. ♂ stayed on lower snag/tree combination, then flew off. ♀ eventually left the pothole, flew across rock and off to SW ridge. 14:30, a falcon reappeared at perch underneath large overhang on right side of rock. Screaming loud. It hopped to another perch under the overhang, then disappeared after 5 min.

14:48 - No sign of peregrines. left site

15:20 - at Buicland eyrie. Falcon can be seen incubating. I parked higher up road, above mailboxes. Eyrie is located right smack in middle of large, open pothole. Falcon panting, sitting on 3 eggs. She looked up, stood up ran to ledge, whereupon her brood patches were clearly visible (2 at least), and jumped off hek-hek-heking. Within less than a minute she was back on the eggs, settling down like a hen. This bird was the dark, heavily barred, colorful one that I saw yesterday. It's amazing where the nest is - totally exposed to afternoon sun. ♀ ~~sleep~~ drooping wings, panting.

15:50 - End of observations.

17:30 - ~~18~~ 20:00 - Stopped at <sup>Squaw</sup> ~~Squaw~~ Rock, Mendocino Co.. Hiked way up the opposite ridge, east of 101, to get a better view of the rock. I thought the falcons might be incubating in an old hawk nest up near the left top of the main portion of Squaw Rock, because this is where the fellow saw the





April 9, 1989

falcon ~~noting~~ ~~was~~ land yesterday. The nest ledge from last year, the long horizontal cleft across the face of Squaw Rock, appeared to have been reduced in size - possibly due to rock slides. There are now two shelf areas, both with rocks piled up on their ~~outer~~ outer ledges, where I think there had been one long, continuous shelf. The rock piles appear to have been man-made (Monty Kivner's Group - ledge improvements), but they sure look fragile. Not too much experiment on the ledges proper. No signs of the falcons. The sun was setting, I kept hiking up higher, staying just in the shaded lee of the rock so I could still focus on it. Clearly saw the raven incubating in her nest. Lots of swallows up way high (500') and to the north of the rock. Air still, loaded with insects, warm. After long searching, I saw a falcon pop up from behind the rock pile on the right-hand ledge. It looked out over the area (possibly at me), then walked down out of sight behind the rocks after only a minute or so. That is, I guess, where the falcons are incubating.



Location: Preston Ranch, near Moraga, Contra Costa Co., Calif.

Date: April 16, 1989

Willow area, entrance to ranch

American Goldfinch: singing males; > 30

Northern Oriole: Pair, singing male; 2 pairs

Common Bushtit: 2

Red-winged Blackbird: singing males

Starling: III

Yellow-winged Warbler: pair

House Finch: singing males > 20;

Purple Finch: singing males ~ 5

Mockingbird: pairs.

Red-tailed Hawk: 11

Brown Towhees: IIII

Raven: pair

Golden-crowned Sparrow: III

Song Sparrows: 3 pairs.

Calif. Quail:

Scrub Jay: 11

Nestel: 1

Chestnut-backed Chickadee: 2

Killdeer: 2 Ladder-backed Woodpecker

Upper Lake:

Meadowlarks: 111

Mallard Duck: pair - ♂ eclipse plumage

Starling: 1

Nestel: 1

~~Ridge~~ Ridges - Northern end

Red-tailed Hawks: 3 birds, including one bird still incubating on nest - clear view of her w/ red tail.

Meadowlarks: IIII 11

Red-winged Blackbirds: 111



Location: Preston Ranch, near Moraga, Contra Costa Co., Calif.

Date: April 16, 1989

Lower Lake area

Great-blue Heron 1

Mourning Dove 2

Anna's Hummingbird ~~1~~ 3.

Western Bluebirds: 2 pair

Western Meadowlark: ||||

Devil's Hole: Salamander (~8", olive drab, vertically flattened, finned tail + eggs.

Wrentit: 11

Bewick's Wren: 1

Turkey Vulture: 1

Loyote Gulch:

Calif. Quail 15

Wrentit: ~~4~~ 4

Downy Woodpecker: 2

Turkey Vulture: 2

Rufous-sided Towhee: ||||

Scrub Jay: ||||

~~Wrentit: 2~~

Western Flycatcher: 2

Golden-crowned Sparrow: |||

Bewick's Wren: 1

Orange-crowned Warbler: 1 ♂ singing.

House Finch: 3

Western Meadowlark: 3 + 2

Am. Goldfinch: 10

Brown Towhee: 6

Northern Oriole: 11 (♀ w/ nest material)

Western Kingbird: 1 ♂ singing.

Red-tailed Hawk: 1

Western Bluebird: 2



April 16, 1989

Location: Preston Ranch, near Moraga, Contra Costa Co., Calif.

Coyote Gulch - cont

Calif. Quail: 111

Common Bushtit: 7

Plain Titmouse: 2

Violet Green Swallow

Hestrel.

We hiked on Preston Ranch from about 11:30 - 15:30, going in our usual loop, first along N-W Ridge, then down to Lower Lake, thence along riparian corridor to Coyote Gulch, up Coyote Gulch to its Western head, then back over to east ridge, above Lafayette Valley Estates, finally back to Lower Lake, then up to Upper Lake.





Location: Pine Canyon, Contra Costa Co., Calif.

Date: April 16, 1989

John Gaim, Maren & I arrived at Castle Rock Park (foot of Diablo Mt.) at approx. 16:00. We hiked up the canyon to the rocks. Lots of Redwings, Black-headed Grosbeaks, and Northern Orioles. Turkey Vultures, Red-tailed Hawks, couple Kestrels. Fewer people on the rocks today. At the meadow we set the scope up ~~on~~ probably within 5 min. the Prairie Falcons could be heard screaming. They quickly exchanged incubation duties (it looked like the ♂ went off, ♀ came on). We then hiked up Pine Ridge to get a better view of the falcon pothole. Could see the falcon incubating eggs. She seemed a bit restless, getting off the eggs twice, once to leave the pothole altogether, then return within a minute. She did several settling moves on eggs, often reaching down with her bill to move them (or are they hatching?). Quite the mother hen. When she left the nest once, she flew to another rock north of their's, sat for a minute, then returned to the hole from the south (I lost sight of her when she landed on north rock). As we were hiking out, ~~near~~ around 18:30, the tiercel came in to chase off about 5 Turkey Vultures which had landed on their rock. Very nice - he really looks small.

Up on Pine Ridge: large flock of Lesser Goldfinches (20-30), singing Lark Sparrow, White-breasted Nuthatch, Downy Woodpeckers (pair); Calif. Quail.



April 13, 1989

With Bob Jones at Moss Landing Wildlife Area, near mouth of Elkhorn Slough, Monterey Co., Calif. We arrived at parking lot for the Cal. F & Game Wildlife Area just east of 101 and north of the former salt ponds. We hiked out along north end of slough into the mud flats. Fair numbers of willets, godwits, least sandpipers, mallards, in the slough area, Red-winged Blackbirds. Several Blue-winged Teal. We walked out into the mud flat via the levee, to the break. About 30 Harbor Seals resting on mud flat. Several pairs of gulls on slough islands - appear to be on territory, as well as about 30 gulls loafing on the levee. We tried walking out into flats, but mud too soft. Since we couldn't proceed farther, we went back to the parking lot. Then drove out to the levee just east of Elkhorn Slough bridge. Walked out the levee. Crane repairing levee in sloughs. Probably not more than 12 pair of gulls scattered about the flats. We walked out the levee, where I then shot four gulls  
DAB 437 - 440: 5 shots / 4 gulls.

f

Q

ice plant

u

April 26, 1989

Travelling by NPS boat from Ventura Hbr. to Santa Barbara Island, Santa Barbara Co., Calif. Approx. travel time 3 hours. Arrived at Santa Barbara Island 11:30. Sunny, hot. Randy was boat skipper. Corky is island ranger. Some plant people, Bill & Carla, from UC Santa Barbara along. After unloading all suits of equipment, the boat left. However, I had forgotten 2 white buckets. The boat turned around after having gone out 45 min! and returned with my buckets. Set up camp, then went out to the south<sup>east</sup> end of the island. About 500 pairs of gulls scattered about the entire slope of Signal Peak. While the rangers & others were ~~removing~~ removing ~~ice~~ ice plants from large plots, I searched the hillside for gull nests - but found only scrapes & fresh nests, no eggs from which to trap gulls! I tried setting more rings over fresh nests - but they didn't work. In addition to the approximate 500 pair at this end of the island, another 500 were loafing about just up from the cliffs. These increased in number as the day progressed. I hiked up to signal peak. On west slopes of island were about 1000 pair of gulls on territory. Also about 75 Brown Pelicans nests just down from crest of Signal Peak. Wind became strong in the afternoon. Nice views

2

April 26, 1989

of Santa Catalina & San Clemente Is. to east & south, and way in distance to the west, the long form of San Nicolas Island. Back at camp saw a very yellow-green flycatcher, at first thought it was a yellow wagtail ~~to~~ from the way it flew. It seemed to have an exceptionally long tail, and was larger than an average empidonax.

Lots of Meadowlarks & Horned Larks! Saw fledged young horned Larks. At night we managed to catch a Xantus Murrelet by hand. Their voices clearly heard throughout early evening & morning. Barn Owls inspected my camp.

April 27, 1989

Went to west slopes for gull trapping. Searched about 1000 nests, found only 4 with eggs!

(3 two-egg nests, 1 one-egg). Trapped gulls off the 2 egg nests - only four birds

DAB 442-445. Lots of work for so few birds.

April 28, 1989

We were picked up by the Park Service boat at about 13:00. Stopped off at Anacapa I. en way. Arrived Ventura 16:00.





May 4, 1989

Landed on Red Rock, SP Day 10:00 AM.

Walking up east Terrace - found Canada Goose nest on beach - pair, 5 eggs. 2! Black-crowned night herons scared up. Saw 2 House Finches, heard Song Sparrow. Heron nest in Poison Oak ~~leaf~~ nests, egg on ground.

Gull nests: Principally top of Red Rock:

NEST:		= 34
+ 1 Egg:		= 11
+ 2 Eggs:		= 24
+ 3 Eggs:		= 21
		<u>T = 90</u>

Peregrine Falcon seen off north-east end of island - looked up, heard a Black-c. N Heron squawking, the falcon dove on it near the beach, then turned + flew back to the San Rafael Bridge. Landed on North pylon of the main south span. Brownish back, streaked belly, 2 song sparrows carrying food in bill. Chicken bones around gull nests. West terrace near top, but below cypress trees has grass-flattened area with loads of Goose excrement. Canada Goose on eggs in crevices above west-facing cliffs. This is the same location as last year's nest. 1 pair Ravens flew past. In surveying the NW tip I scared up 85 Blue-crowned Night Herons. As we came down the east terrace I heard a squawk - as I looked up some

3

May 4, 1989

the Peregrine stoop on a Black-crowned Night Heron, hit it rather hard with its feet, then fly off. After we went down to the beach I got the gun out and proceeded to try to collect nesting gulls "diplomatically". Scrambled up the N. east terrace, shot 2 birds on territory (DAB 446, 447); then another near its nest on the beach (DAB 448). 5 shots, 3 gulls.

Summary of birds on Red Rock, SF. Bay:

- 1) 85 Black-crowned Night Herons (+ nests in poison oak + cypress trees)
- 2) 90 Western Gull nests (mostly on top counted); w/  
{34 fresh nests + 56 nests w/eggs}  
351 potential nesting gulls counted on boat survey -  
all cliffs, etc.; on ~ 175 nests total  
for the island.

estimate 150 - 200 Western Gull nests on rock.

- 3) Song Sparrows - nesters
- 4) House Finches - " "
- 5) White-throated Swifts - nesters
- 6) Canada Geese - 2 nests w/eggs
- 7) Peregrine Falcon - ♀, juvenile.

## Red Rock - Boat Survey

East Terrace - 127 WG  
16 BCNH  
1 Can. Goose  
nest + 5 eggs

N. Terrace  
62 WB

3 BCNH

split NW ~~Boat~~

57 WG

NW Terrace

100 WG

W. Face

90 WG + 16 WB

Rock

43 Pelagics

6 Brandts Cormorants  
2 Spotted.

- 1 Canada Goose nest w/incub. ♀.

## Walking Survey

### East Terrace

~~21 BCNH~~

+ 59 BCNH

1 nest / egg on ground  
for

Total Western Gulls counted during boat survey:

127

62

57

100

90

335

+ 16

351 → W. Gulls counted

4

263.511  
175 → nests.

✓

May 5, 1989

Went to Alcatraz Island w/ Ray Pierotti, Alan Fish, Terri Thomas (GCNRA). Alan Fish had organized a symposium on the gull situation on Alcatraz. Development plans for Alcatraz, as laid out in the Lawrence Halpin proposal, does not take gulls into consideration. In fact, in our meeting it was made clear that the plan as it stands would 1) significantly, adversely affect the W. Gull population and 2) the W. Gull population represents an important resource for both the Bay Area and the N.P.S. (through the possibility of offering great visitor/gull interpretation). Since the colony is significant 250-300 pairs, some consideration for developing gull nesting habitat should be made. The initial plan calls for develop. the Parade Grounds and open a perimeter trail. Both will be OK if gull nesting habitat could be improved on the western & industrial building roof. In addition, certain areas could be designated & managed for gull breeding: eg. incinerator area, NW shore, etc. Provided that barriers could be erected & grass mowed. Perimeter trail should be opened in January to allow gulls to adapt to regular visitors.

On Alcatraz I., many gulls on eggs, I'd say about  $\frac{2}{3}$  of nests had eggs (slightly advanced compared to Red Rock). Parade Grounds has approx 40 nests. Island vegetation very lush - due to late rains.

On my return to SF I walked to



May 5, 1989

the Bay Bridge to check on the Peregrines. Saw a falcon sitting on hose hanging down from span east of cement pillar/anchorage. This was at 16:00. As I scanned over bay to south saw the falcon was powering down in a long dive towards water. Well south of bridge the falcon dove into flock of small shorebirds that may have been crossing the water [W. Sandpipers?] or came up from the water (Phalaropes?). Two groups of shorebirds split up. Falcon chased one group just above water, but then I lost site of it. Soon thereafter the bird returned to the hose & sat for about 1.5 hours. I don't think it ate. Large ships passed underneath, including an aircraft carrier (#70) without disturbing it. At 17:30 falcon disappeared. Reappeared at about 17:45 on beam just east of last pylon of bridge on SF side. Nice view of it preening. Could see Dave Gregorie & film crew trying to film it.

11



May 22, 1989

Left Berkeley at 15:00 hrs, drove Highway 5 north, arrived Portland, OR at 12:30 hrs.

Intermittent, heavy rain from Weed, CA northward.

May 23, 1989

Left Portland 10:00 hrs, arrived Chinook, WA about 12:00. Glenn Eager was in his office at the Port of Chinook. We shot the breeze, he and Mike said they got a new outboard for the skiff, and I'm welcome to use it. Wind was blowing too hard to come out at high tide (16:49). I got everything ready though, went to Astoria, talked to various gunsmiths, etc. The wind finally died down enough around 19:00 hr. I loaded up the boat and came out at 20:00 hrs (left Chinook). Scared up 2 flocks of Mallards at the pilings on East Sand Island, and a pair of Canadian Hens. The gulls got very upset. It almost looks as if I am too early - many birds may not yet be on eggs. I discovered I forgot a bucket of food, so I may have to go back tomorrow morning.

May 24, 1989

Got up at high tide (03:00 hrs). Broken clouds,  $\frac{3}{8}$  moon. Boat was OK. Decided to motor back to Chinook & pick up food bucket. Trip OK, no major problems - went back to

Spent

P. 1 P. 2 P. 3 P. 4 P. 5 P. 6

D M L

Ins

1. 100 100 100 100 100 100

Pigment

Darwin Md. Light

Fine - 1/2 inch

F 3/4 1/2 1/4 D

P. 7 ps

1. 100 100

Blanc

1. 100 100

# Field Notes

May 24, 1989 - cont.

sleep in tent at 05:00. Got up at 10:00! Arranged camp, checked boat. Intermittent rain. Set up blind in central colony. Out in mud flats saw 9 Greater Scaup on water; 8 ad. Canada Geese (large) + 3 sets of chicks: 9 + 9 + 11. all about 2 weeks old. 6 Snow Geese. One imm. Bald Eagle (2½ years old). The ~~two~~ Cormorant colony at w. end of island is active, several groups of Double-crested Cormorants going by.

13:00 - 19:00: Watching nests & recording to morphotype frequencies from blinds. Observed a forced copulation between ♂ H/♀ WG.

19:00 - 21:00 - Surveying middle, east portion of island. This is the area where dredge spills were layered many years ago. Just off the dredge spills the area has become quite overgrown with brackish willows. Nutria sign all over. Yellow-brown ~~bananas~~ banana slugs with every step - billions of 'em. Seem to be fewer barn swallows this year. Saw one pair of tree swallows. Song sparrows most common landbird. Scared up one White-crowned Sparrow. Single pair of Gadwall off the south side of island. Only an occasional Caspian Tern. Small flocks of imm. Ring-billed Gulls.



May 25, 1989

10:00 - 16:00

Back in blind trying to obtain morphotype on a few more pairs. Saw three courtship feedings so far - all fish (one of large fish (8"), ♀ couldn't swallow - bright green sides; 2 others of minnow type fish. One forced copulation (attempt only). ♂ from nest 11 (WG) came over and hopped on ♀ from nest 13 (WG). ♂ of nest 13 (W/h) came in and "uprighted" the intruder away. 15:30 - Had I'd all nests 1-18 except: (16) no eggs; and 15 (only one bird is present, I believe the male). The male from 15 (Hy) has been sitting all day. Several times he has left the nest or just stood up and preened. I get the impression his mate is not coming back. He walked over from the nest, then coughed up small fish, only to swallow them again. Then he walked back to the nest and resettled on eggs.

16:15 Went back to camp, ate dinner, checked on boat.

18:00 Decided to set up second blind. Went out to grassy area west of first blind. Fair number of nests with eggs. Ducks quite disturbed. Sat in blind until 20:00. Then came back to first blind. ♂ of pair 15 still on nest. Waited until 21:30. No change of mates. Saw pair of Widgeon in Baker Bay. Small flocks of Scaup near boat.



May 26, 1989~~07:00~~

05:15 - Up to check on boat. The 8.0 tide floated it. I moved it to a deeper mooring so the lesser tides will float it. Went back into the tent at 0600. Wet & rainy, cold. Imm. Bald Eagle flew by.

0930 - Up late !! Raining all morning. Loons heard calling. Saw couple Common Loons. Went out to tent #1. Watched nest 15. Finally saw both of pair at 12:00. Both hybrid gulls! Also saw a pair of GW's courting. 13:00 - 20:30 In tent Location 2, checking gulls. Rained the whole time - sopping wet. Took down blind #1 in rain. Wind 20 knots. Nearly blew the blind apart.

May 27, 1989

Up at 06:30 to check on boat - it floated on a 7.4 tide! whew. ~~Rain~~ Rained hard all night. Clearing this morning. Double rainbow over Fort Canby! & Lighthouse. Quite beautiful. Had dry breakfast.

09:00 - 14:00 checked gulls in blind 2 area - also grassy, rocky & driftwood habitat. So far, the 2 blinds have been in the grassy, rocky middle portion of East Sand Island west of the thinnest part of the center island area.

15:00 - 17:00 Survey east end of island. Counted 46 Mallards, 33 Canada Geese (#4 broods), 2 widgeon on marshy flats at NE end.

In beach-shelf area (sand, driftwood, long beach grass habitat) counted 356 gulls. In area of dredge spills - the level table at east end





May 27, 1989

of island - counted about 100 gulls.

17:00 - Set up blind location 3 in grassy habitat area between blinds 1 + 2. Checked morphotypes until 20:30. No rain all afternoon + evening. Beautiful evening sky, broken clouds + red hues. Should mention that I regularly see nutria from the blinds. Usually towards evening. They come out + graze inbetween the gulls. The gulls don't seem to mind.

May 28, 1989

Up at 08:30. Rained much of the night, still raining. The boat was already dry when I checked it at 09:30. Strange - this went out quick. From camp saw Violet-green Swallows + Bank Swallow, in addition to Barn swallows. By the way - thought I heard Black-capped chickadees yesterday, + Goldfinches. Definitely heard Brown-headed Cowbirds.

10:30 - In blind #3. Recorded morphotypes until 14:30. Then weighed + measured eggs.

16:30 - 20:30 - Set up blind #4 on dredge tailings at east end of island. This colony appears to be later than the other colonies, also seem to be more hybrids + pure GWs. The habitat is sparse brush, mixed grasses, some in clumps. At the east end it's all quite flat + sparse. The grass becomes thicker + higher at middle + western portion of the dredge "table". As I was in tent a man walked by,

1

2

May 28, 1989

I asked him what he was doing, just kind of a heavy-set guy, rather slow, red-neck. He said if this was a protected island, why isn't it posted.

The evening was just beautiful. Rather calm, broken sky. The gulls settled in next to the tent very well. Even had a pair move right under the window. Canada geese landed on the flats in the gull colony. On my way back to camp I passed 3 dead Sea Lions on south beach.

Savannah Sparrows are in the marsh habitat and on the dredge-table.

May 29, 1989

09:30 - Counting overall types for middle portion of island. Another man came up to me. He & Buddy are camping at waterhole on east end. Just great.

10:00 - In blind 4 picking up final nest types. Unfortunately, the jerks that are camping at this colony are upsetting the gulls too much. Nevertheless, I figured out the morphotypes of a few more pairs. Tried recording some, too. Then marked the nests, measured eggs, and packed up the blind. This colony is definitely a later colony than the gulls nesting in the middle area. Also surveyed the eastern end for overall proportions of W6:H:GW (Western: Hybrid: Glaucous-winged gulls).

14:30 - 16:00. At Blind 3 deciphering remaining gull

May 29 - 30, 1989

Boat Lic. No. of East Snd Island Campers

WN368AT

May 29, 1984 - cont

pairs. While I was in the blind one of the campers came out and walked clear around the west end of the island. He did exactly what I told him not to do!

The idiot. So when he came back in my direction I chewed him out for disturbing the entire island.

He must have scared up about 400 gulls and 100 cormorants at one time on the far west end.

Anyway, I cleared out my blind, packed up camp and got ready to leave at high tide.

Wandered around the middle portion of the island.

Scared up some fresh-fledged Savannah Sparrows in the willow area. Saw Horned Larks on table-dredge

area. Violet-green Swallows, ~~Bank~~ Rough-winged & Barn Swallow at pier pilings.

Starlings nesting in holes of pier

ruins. Small mammal - rat size - scampered out from under my feet (young Nutria?).

Saw the 3 Black Brant and a couple dusky Canada Geese on mud flats west of pier.

Common Loon, in breeding plumage, on water.

Fair numbers of greater Scaup (>100), some lesser Scaup, too. Small group (7 individuals) of

Least Sandpipers on beach. And Killdeer

definitely nesting on the island. Yellow Warblers frequent the trees (conifers) at my camp site.



May 29, 1989

East Sand Island survey: Gull morphotypes:

1. Western-middle area of island (Blinds 1-3)

105:52:16

W:H:GWC

Grass (low)  
driftwood habitat

2. East end of island: Beach, beachgrass, driftwood

109:36:15

3. Dredge Table: Clumped grass, sparse bushes

57:48:14

\* Total numbers of nests (estimated): Gulls

East Beach / Driftwood 150-175

Table / Dredge spoils 100

Middle areas west of pier pilings: 150

West end - sandy beach, grass, wood: 250

Total Gull nests: 650-675

Cormorant Nests: at least 85 nests, with  
easily 100-200 resting on the island.

May 30, 1989

Tried coordinating island trips in Willapa  
Bay & Grays Harbor. Trips will get next  
week. Made command decision to drive down  
to Charleston, OR for last chance at collecting.

Trip supposedly takes 4 hrs from Portland. I left  
Willapa Natl. Wildlife Refuge<sup>WA</sup> at 12:15, arrived  
in Charleston, OR at 19:30. This travel time includes  
stops in Portland & Drain. Highway 38 between 5 and

Saw imm.  
Bald Eagle  
head north  
over  
Willapa  
Bay NWR  
Hdgs.  
Disturbed  
gulls

//



May 30, 1989

101 is gorgeous. Saw pair Ospreys south of Reed's port.

May 31, 1989

Met Jan Hoddard at OIMB in Charleston, OR. Went over to the Coast Guards' ANT station to request the key to the Cape Arago Lighthouse from Chief Miller. Went out to the island from 10:00 - 15:15. Weather sunny, but extremely windy on the island (30 knots). Started checking hybrid types, set out 2 traps, specifically on nests that had hybrid or glaucous-winged gulls. Caught 2 pairs of gulls (DAB 469-472). One pair ♂WG ♀GW; other ♂GW ♀H. Out of the entire island I identified only 2 other rather definite mixed pairs: a ♂WG ♀GW, and ~~a~~ ♂GW ♀WG. The latter pair is nesting on north side of base of peninsula, close to same place as last year. Most of the island's gulls appear to be good Westerns. The gulls have been forced somewhat off the peninsula because the Double-crested Cormorants have erected nests at the beginning of the peninsula. Last year this area had gulls on it. Other birds: Tufted Puffins - soaring back & forth in repetition in front of the cliffs. Pelagic Cormorants nesting on cliffs. Oystercatchers (1 pair) at the beach below the bridge. Tree Swallows + Barn Swallows, American Goldfinches, House Finches. Song Sparrows, Western Woodpeckers, Swainson's Thrasher on approach to bridge. I have the impression that more gulls are nesting

Q

May 31, 1989

grass area near the Lighthouse. Jan Horddard came out around 14:00. We watched gulls for awhile, then I packed up my traps, and we left. Spent rest of day processing the four gulls. <sup>Saw imm. Bald Eagle fly up the Charleston Slough, heading north. Sunset.</sup>

June 1, 1989

Picked up key to the gate + Lighthouse(!) from Chief Miller. Spent most of 09:30 - 15:00 in Lighthouse watching gulls + recording morphotypes for gulls. Extremely foggy, could barely see the peninsula of the island. Then weighed + measured eggs of 21 pair. Made an independent count of gull morphotypes for the peninsula area; out to west end as far as I could see. The far west portion was shrouded in fog.

Ratios: 113 : 4 : 2      WG : H : GWG.

June 2, 1989

Drove from Charleston, OR to Newport, OR. Weather very windy, heavy fog on coast, warm weather inland. Went out to Yaquina Head pen 19:30 - 21:15. Noted gull morphotypes for a small colony on south <sup>grassy</sup> slope of Lighthouse. The rock offshore of the head seems to have more Murre and Cormorants this year. The entire flat top is covered in Murre + Brandt's Cormorants. There are definitely several more Pelagic Cormorants on the shelves below the rim on N. side of head. Gulls also abound.



# Field Notes

June 3, 1989

Spent morning on porch of housing at Hatfield Marine Science Ctr, Newport, OR. Song Sparrows, White-crowned Sparrows singing, Am. Goldfinches, Barn Swallows, Brown-headed Cowbirds, Starlings. All seem to be nesting here. Checked in with Jeannie at NEWPORT WATER SPORTS (503) 867-3742 to confirm tomorrow's zodiac trip out into the ocean. Supposedly everything's set for Sun. morn, when the driver will show. Went up to Yaquina Head to check gull types, then on to Lincoln City to look for gun shops. Back at the Head for Sunset.

June 4, 1989

The zodiac trip fell through! Damn. Trying other people this morning. Heard Purple Finches at the HMSC docks, also Swainson's Thrush. Lots of American Crows. Got ahold of Bob Loeffel, a retired F&W fellow, who agreed to take me out tomorrow. Spent afternoon counting gulls at Yaquina Head. Weather sunny, hot in town. Tons of boats on water. Wind picked up in the afternoon.

Yaquina Head, Lincoln Co., OREGON - Nesting Gulls

- 1) Big Rock 40:10:3 W: H: CWG
- 2) NW Rock (sm) 14:3:2
- 3) SW Rock 35:3:1
- 4) SW Head Peninsula 12:2:1
- 5) S Rock 4:1:1



June 4, 1989

There are definitely fewer gull nests on the south slopes of Yaquina Head this year. In fact, where there were about 10 nests there are now 2. Some of the rocks also have fewer nesters.

June 5, 1989

05:30 Met Bob Loeffel at the South Beach Marina. We launched his 14' Chriscraft and headed out the bay. Thick fog, near misty drizzle, but no wind. Coast Guard said we could go past the jetties because the bar conditions were too rough. So we stayed between the jetties and I chummed gulls. Boat traffic was nearly minimal, but the Corps of Engineers "Padre Island" was dredging the entrance. From about 06:00 to 07:20 I collected 8 gulls (DAB 474-481) along the entrance jetties to Yaquina Bay, Lincoln Co., Oregon. Got 8 birds with 9 shots. Two were non-breeders, unfortunately. In addition, saw a Heermann's Gull, couple Brown Pelicans, a Jaeger, possible Elegant Tern. Common Murre feeding around us. Pigeon Guillemots on jetties. Saw several Green-backed Herons this morning on the compound of HNSC.

8/9

June 6, 1989

Drove from Newport, OR to South Bend, WA today. Saw a Bald Eagle (subad.) near Beaver, OR. Stopped at Tillamook Bay, intending to collect 1-2 Glaucous-winged Gulls on the spit. Warm,

2



June 6, 1989

sunny day. Walked out road along Bay side of spit. Singing Yellow-throats, White-crowns, Song Sparrows in the brushy areas along the way. Also American Goldfinches, ♂ Marsh Harrier, Brandt's Cormorants, Crows, Robins. Crossed to the ocean side at the start of the lily forest, stopped at crest of dunes and set up. Gulls usually ~~follow~~ use dune ridge to soar into NW'er and proceed north. But today there's hardly any wind. It's never been so calm out here. At any rate, only a few groups of gulls passed within range over the course of 2 hrs, 15:00 - 17:00. One perfect Glaucous-wing passed the peninsula way out of range. I think few gulls are flying the beach because the winds are so low, most are out at sea.

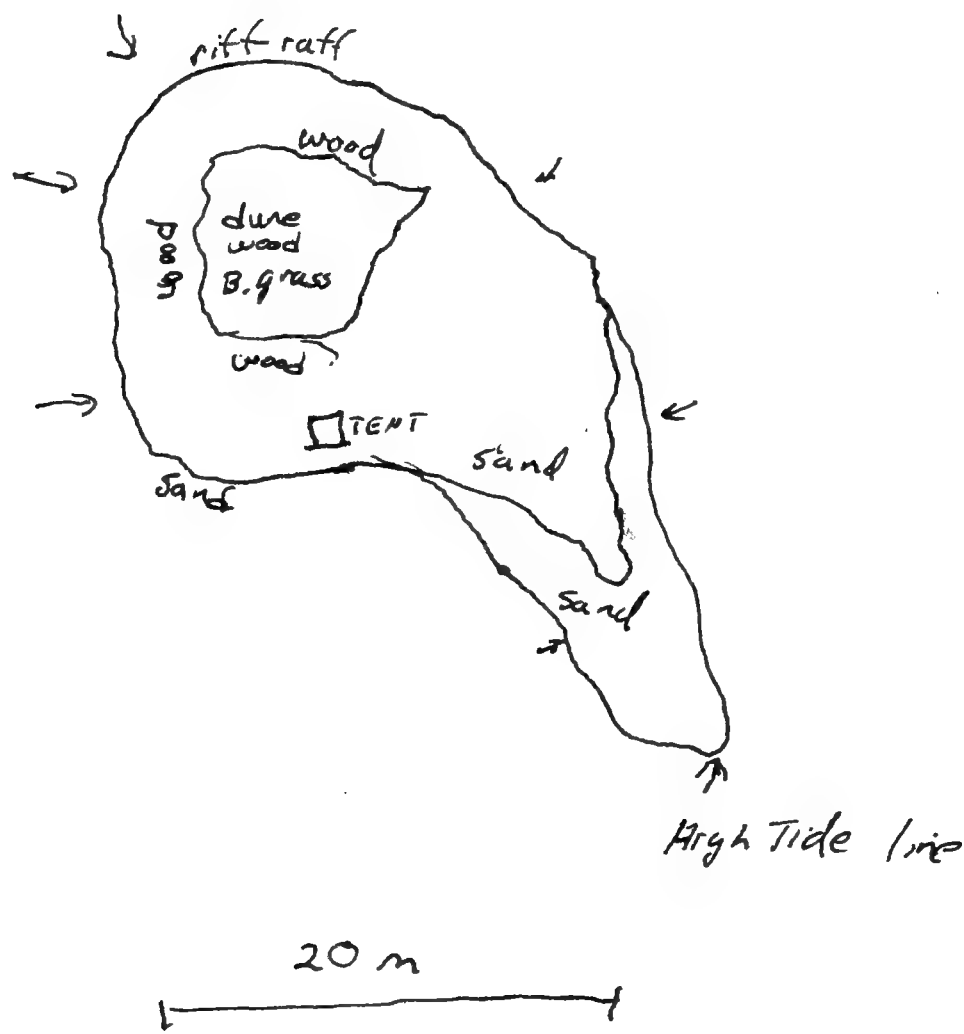
Crossed back to bay, Savannah Sparrows in dunes. Out in marsh groups of resting Ring-billed Gull, Greater Scaup, one Black Brant, couple Mallards, group of Snowy Plovers (2 ads, 2 imm.), Caspian Terns. Kingfisher over ponds (2). Another Bald Eagle seen on Willapa Flats. Spent night in South Bend.

June 7, 1989

met the Coast Oyster barge at 09:00. Out to Pin Island by 09:30. Along way saw large flock Greater Scaup (>50). Couple herons, one Bald Eagle (sub. ad). Loads of Harbor Seals.

S  
↑

Pine Island: (Willapa Bay)



June 7, 1989

on bars. Pine Island is as small as ever. Bulls are really crammed in. Dead ♀ Harbor Seal at High Water line, pup of hers (did she die in birth?) is trying to make it to water, but it looks weak. Set up blind, noted gull types until the boat came to pick me up at 12:30. On way back to South Bend we circled a navigation piling where a pair of Barn Owls were nesting. In the evening I went for a walk over fields & along sloughs on north estuary of Willapa Bay. Numerous crows, 2 Bald Eagles, couple Ravens, Yellowthroats, Barn & Tree swallows, Swainson's Thrush, Am. Goldfinches, Mallards (2 ♀s scared up out of a slough).

June 8, 1989

Met the Oysterman at Coast Oyster Dock. Craig took me out to Pine Island, Willapa Bay, Pacific Co., Washington. I'll spend the night here. Arrived & set up by 10:30. 2 Bald Eagles (ad & s.ad) on sand bars - I think they were feeding on some of the dead Harbor Seal Pups here. Stayed in blind. Heard an occasional Ring-billed Gull & Caspian Tern fly by. Observed gulls from blind until 17:00. Figured out mates for approx. 50 pairs, then went out and weighed & counted eggs. This took longer than expected. Finished



June 8, 1989

Two hours later at 1900. Cold. A couple nests had pipping eggs. Many nests had fewer than 3 eggs. I think this is due to the intense crowding of gulls on this island. The nests are really packed in here. Add to the nesting gulls the 300 or so resting gulls on the flats next to the island and you wind up with a lot of gulls. West of the island on one of the bars a large dead Gray Whale had come to rest. It was about 250 ft in length. Large flock (+100) of gulls were on it this evening. I think my general impression from the island is the large proportion of Western-type gulls and surprisingly few Glaucous-winged rare types. The data collected may verify this impression.

June 9, 1989

Windy night last night. Up at 0600. Decided to do a general survey of the island first, then attempt trapping from nests. Pine Island (Willapa Bay, Pacific Co., Washington) is very small. There are about 3 "habitat" types present: sand; Riff-raff, wood & sand; and dune, wood & beach grass. The sand is found around the mean high-tide line and along a spit jutting out to the NW. The spit is about 20 m long, narrowing from about 15 m wide where it connects with the island. This area has the lowest concentration of gull nests. The riff-raff area encircles most of the island. The eastern & southern shores have the next highest density of nests. Finally,



June 9, 1989

~~the "island" proper, about 10 m x~~ The riff-raff beach is about 5 m wide on average. Finally, the "island" proper, consisting of wood (driftwood), beach grass + a few low dunes, has a high density of gulls; but the previously-mentioned E + S shore's density may be greater. The "island" proper is only about 15 m x 15 m. Survey Results:





June 9, 1989

After surveying the island I went back to my tent and set up the traps. The tent was covered in gull guano: it smelled like a mixture of liver & pure protein.

Perhaps the gulls had been feeding on the whale?

Managed to trap 2 gulls, and shoot 3 (OAB 482-486).

3/3

Got 3 birds on 3 shots. Was picked up from Pine Island by Jim & Dave Aris.

Drove down to Willapa NWR to process the gulls.

20:00 - 21:00 Went out to Cape Disappointment, north side of mouth of Columbia River. Good lot of Swainson's Thrushes with their "whoooot" whistles abound. Also hearing ~~the~~ Varied Thrushes. (Saw Coyote cross the road at south end of Willapa Bay). Purple Finches singing too. On cliffs below lighthouse - Brandts & Pelagic Cormorants; gulls. House wrens singing in shrubery. Spent night at Fort Columbia Youth Hostel. Phil was still there.

June 10, 1989

Phil took me on a tour of Fort Columbia. Also out to a snag on the lower side of the more west-facing slope of the park, where Bald Eagles have their nest. Saw one adult standing next to the nest. Could not see any young. New bird at the fort: Wilson's Warbler. Planned to meet Gene Leach at Chinook who'll take me out to East Sand at 15:30 today. Wind quite strong - clearing. Met Gene at 15:00. He decided to let me take his boat. Wind gusting to 20 mph. Waited until ~~at~~ 18:30 before going out.



June 10, 1989

Rough ride, wet. 3 ft. waves (12 foot aluminium skiff).  
The sub ad. Bald Eagle left the island as I landed.  
Savannah Sparrows, Song Sparrows singing. Saw the pair  
of Gadwall's fly overhead towards sunset. Set up camp,  
and blind on dredge table.

June 11, 1989

On East Sand ~~Is~~ Island. Mouth of Columbia River,  
Clatsop Co., Oregon. Two people have landed on west  
end of island 09:30, proceeding on foot east. Scaring  
up hundreds of gulls. When they got to my section of beach  
I went out & talked with them. 2 fellows in their 20's.  
One said he comes out for years. They were picking up plastics,  
ropes, etc. Said they seen more & more fish netting of the  
nylon sort. Think they left at about 12:30; disturbing  
every bird on west end, including cormorants. In  
blind on location 4 from 10:30 - 13:30. Doing voice  
recordings. I was surprised to see many of the nests I  
had checked in May to be empty, or missing eggs.

Around my camp: Song Sparrows, Barn & Tree Swallows,  
Starlings, Crows, Raven. Heard a Yellow Warbler  
singing at ~~the~~ dawn. On my way back from blind  
on location 4 I was dive-bombed by male gull. He had  
3 egg nest. He came so close, even while staring right  
at him, that I considered trying to wack him. Well,  
then he hit me in the head. So I took out my



June 11, 1989

folding chair, turned my back on him & waited. He went into his dive, and when I thought he was nearly on me I swung the chair up. Whack! I nailed the poor guy. Died instantly of a broken neck (DAB 487).

From my camp near the old pier on north side of middle portion of island I counted 309 breeding gulls in the dune/sand/driftwood area of west end of island. This is the area just east of crest of dunes where the cormorants are nesting. Counted 280 breeding gulls from dunes to camp, but this does not include any gulls ~~on~~ on south western beach-driftwood piles as they are out of sight. I think it's safe to estimate 300 gull nests on west end dunes, and 300 gull nests from the dunes east to the central pier pilings. Then another 30 nests on south beach to east end, 100+ nests on dredge table, 150+ nests at east end beach, driftwood. Totalling then 880 gull nests (a definite under estimate). Also 6 more cormorant nests in a tree at west end.

Saw 2 groups of 5 Brown Pelicans. First of the season! (for these parts).

Went back to the blind on the dredge spill to collect gulls. Collected one bird right next to blind. Had put 410 aux in the 16-Gauge. When pair 72 were standing right next to each other I pulled the trigger. Thought I pulled the 410, but it was the 16-Gauge Larell. Nailed the ♀ only (488), a hybrid/GW.



June 11, 1989

Too close. ~~After~~ After the gulls calmed down, I got both of pair 71 with one shot. <sup>(DAB 489, 490)</sup> The gulls were pretty jumpy by then. Tissueed the 3 birds, then took the boat into Chinook at high tide to drop my tissues in the N<sub>2</sub>-tank in the car. Went back to the island for the night.

June 12, 1989

5/4 Up at 06:00. Saw crows dive-bombing a Red-tailed Hawk. Collected mate of Pair 72 from blind (491), then a single flying over the colony (492). In all for East Sand Island: 1 gull with a chick, and 5 gulls on 4 shots. Quickly packed things up and sadly left East Sand on High Tide. Rode slowly out on very calm water, kept looking back at the island which I probably will not visit again for quite some time. Drove up to Westport, Washington.

June 13, 1989

Met Mike Linn at Coast Oyster (Markham, WA) on Grays Bay at 06:30. After coffee we hopped in their boat, and he took me out the islands in Grays Harbor. On the way we got good views of 4 Grey Whales (medium size - 30'). Many Pigeon Guillemots near navigation towers, and quite a few Cassin's Auk Rhinoceros Auklets feeding in the Bay. Mike





June 13, 1989

said the whales have been hanging out in the bay for several months. Mike suggested I try Goose or Sand Island first. We went past Sand Island first, saw that it has a huge Caspian Tern colony (+1000) on its North end, in beach grass, sand habitat. We went on to Goose Island and saw that D-C Cormorants have literally taken over the southern portion of the island. The entire dune/flat area was flattened by cormorants. As we approached the island probably 500 D-C Cormorants were scared up. The gulls seemed to be forced to the perimeter of the dunes for nesting. We didn't land, but went back to Sand Island which lies just SW of Goose, and braces the Harbor entrance. I was dropped off at the N end of Sand Island. Proceeded around the Caspian Terns and down the spine of the island to the first larger gull colony at the start of the dunes/grass habitat. Set up the blind & watched gulls from 09:00 - 13:00. Most of the birds in my immediate vicinity were of Western Gull morphotypes. These were all nests placed mostly on <sup>sand</sup> ~~sand~~ and next to driftwood. If anything, more Glaucous-winged seemed to be nesting up in the tall beach grass, where it is hard to observe birds without an elevated platform. Some chicks are already present, and some nests appear to be just starting up, especially those in the less superior habitat such as beach riff-raff. When Mike came to pick me up the wind was blowing pretty hard, and it



June 13, 1989

was raining lightly. Over 75 Brown Pelicans lifted off the beach just behind the Caspian Tern colony. I'll return to Sand Island tomorrow.

June 14, 1989

2/2 Mike Linn brought me back out to Sand Island, Grays Harbor, Grays Harbor Co., Washington. Recorded gull morphotypes from 08:30 - 12:30, then collected 2 gulls DAB 493-494. 2 birds on 2 shots. I noticed an egg-stealing gull. Every time it came into the colony all the gulls would alarm call. Several usually gave chase. Saw this gull down a whole egg in one gulp.

June 15, 1989

Mike dropped me off on Whitcomb Island, Grays Harbor, Washington. Set up both my sleeping tent and my observation tent. The island is in the highest dune area at middle-north end of island. Spent rest of day noting gull types & weighing eggs. This is a large colony of mixed birds. Counted gulls overall:

Small south colony: 110 gulls (nesting)

Middle flats to dunes: 234 "

Dunes to north end: 370 "

Another large Caspian Tern colony on this island - its at the SW end, near the small south gull colony. This land is new - the sand and dunes are

2

1

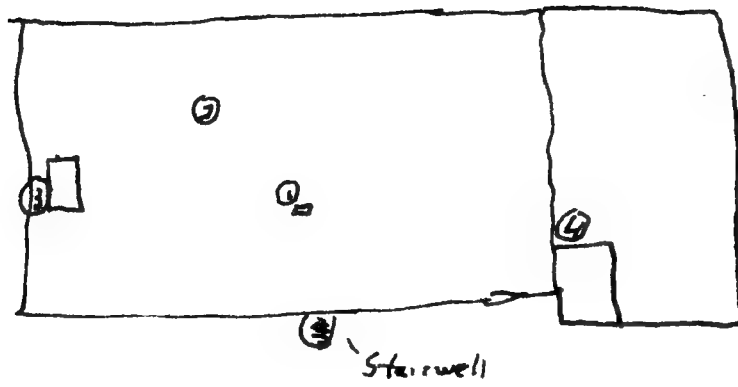
June 15, 1989

now high enough to support a tern colony (I don't recall a large tern colony here last year). Probably fewer than 700 Caspian Terns in this colony. These birds are also less "nervous" than the colony over on Sand Island. Spent the day from 10:00 - 19:15 in blind, then measured and weighed eggs from 19:15 - 21:15.  $\frac{3}{4}$  moon out, broken clouds, beautiful & night sky. Surprisingly, the entire colony became quiet after 22:00.

June 16, 1989

The Caspian Tern colony became noisy at 04:30. But I slept until 06:00. Went right to study site at the high dune area, finished weighing some eggs, then climbed in the blind. Got all morphotypes on my pairs by 08:45. Then got out the gun to collect a couple birds. Thought I would try to get a particular W/GW pair with one shot. The angle from the blind was good to possibly even pick up a third bird. While I was planning this out the pairs began mutual preening and all congregated in line so I fired. 4 dead gulls resulted! As I packed them up I noticed a fifth dead bird further back. So, all for one shot - 2 mated pairs (DAB 495, 496, 497, 498) and one single (499). Turns out, the single belonged to a 3 chick nest whose mate showed up. So I shot him (DAB 500), then put the chicks in other

Port of Olympia Warehouse roof:  
Nest locations:



WA  
Dept.  
Wildlife

June 16, 1989

nests with comparable-aged chicks. Mike picked me up from Whitcomb Island (Grays Harbor, WA) at 10:00. On ride back to Markham I saw a couple Cassin's Auklets on the harbor. Spent rest of day at the Coast Oyster Plant, Markham, preparing the gulls. Saw several Caspian Terns, gulls along the slough there, plus a Bald Eagle, Rufous Hummingbirds, Barn, Cliff & Long-winged Swallows. On the islands in Grays Harbor I also saw an occasional occasional long-billed Curlew, and ad. Ring-billed gulls that make one believe they might be nesting out there. Drove to Olympia, WA, met Mike Graham & I at his boat. We went for a ride in his skiff - a beautiful sunset, calm evening on the water.

June 17, 1989

08:30 - Trapping gulls at the Port of Olympia Warehouse next to the Dept. of Wildlife's office. Caught a male (OAB 501) off 3 egg nest with pipping eggs (nest 3) right away, but nothing else for the rest of the day. Left my walk-in traps on nests 1 + 2 overnight. Mike Graham & I went for another evening cruise in his 14' skiff "Brown Trout". Weather had been rainy, but it cleared by evening.





June 18, 1989,

Caught a female in trap over nest #1 (DAB 502). She was the loud one. Also has darker 1<sup>st</sup> tips! So much for pure Glaucous-wings in Olympia.

Drove from Olympia to Neah Bay, WA.

~~June 18, 1989~~ Arrived in Neah Bay about 19:00.

Was sitting in MAKAH CAFE with a view of the bay when an ad. Bald Eagle came stooping down upon an Osprey. The Osprey dropped something which the Eagle picked out of the water. As the eagle flew away the Osprey made one long shallow stoop at. The eagle landed on an old piling + sat for about an hour. Could not see if it ate anything.

June 19, 1989

Met Bob Paine + his group (Tim Wooten, Sarah, Liz) from U. of W. at Al's Big Salmon at 12:15. We got the stuff out, and Al took us out in his dory to Tatoosh Island, off Cape Flattery. Rain + rough water. But out the island, partial clearing. Once again, loads of gulls loafing at the beach (+200). Pelagic Cormorants on the rocks.

Bands of crows about. We got set up by about 16:00. Bob caught a 15 lbs King Salmon for dinner. I explored the island. Tree, Violet-green + Barn Swallows about the buildings. Apparently the Barn Swallows are having a rough time nest building because of the dry spring. Song +



June 19, 1989.

Fox Sparrows about the thick Salmon Berry.  
American Goldfinches feeding on some of the grasses.  
Some of the gull pairs which I collected last year  
on the W x S end seem to have vacant territories  
this year. Plenty of Tufted Puffins. The Common  
Murre colony on W. end seems larger this year.  
An sub-ad Bald Eagle flew over the island,  
creating major panic in the gulls.

June 20, 1989

Up at 0600, in blind on beach by 07:00. Can  
~~hear~~ hear Winter Wrens singing in brush below  
cliff. Checking gull morphotypes. Seem to be quite  
a few intergrade gulls around - mostly Glaucous-wing  
types, or similar thereto. Spent nearly entire day in blind.  
When darkness hits Bob Paine & the gals set up  
a mist net on Tote Point (S end) for Petrels.  
I was out on the cliffs near the Lighthouse (W),  
just enjoying the circling Tufted Puffins, Murres  
and gulls. Anyway, by about 10:30 we went out  
to the net and waited. Only 1 petrel (Leach's)  
in first hour, but then things got hot. Between  
24:00 - 01:00 we caught 22 petrels (19 Leach's, 3  
Fork-tailed Storm Petrels) + about 6 Cassin's Auklets.  
The night might not have been so good were it  
not for the clouds blocking the nearby full moon.



June 20, 1989

On our way back to the house we had Petrels flitting about no like bats. We banded the petrels we had & released them. In bed by about 2:00 AM.

June 21, 1989

Went down to the beach to collect gulls at 08:00.

7/3

Collected 7 birds on 3 shots - 3 pairs of gulls and one single. <sup>DAB 504-510</sup> Most pairs I had typed-out. Apparently, Bob Paice heard a Peregrine cackle after I fired the first shot. The old bird took off and flew away. I didn't even see it. Bob found a fresh-killed Rhino. Ankle - totally cleaned out by the Peregrine. As I was cutting up the gulls one ad. Bald Eagle flew over the island. Also, Black Swifts were courting overhead. Saw several Rufous-Hummingbirds. Bob, and I, think the Tufted Puffin population has increased. The Peregrines have disappeared from Cape Flattery (said Ulrich Wilson), and in WA many pairs have failed. Still, they expect 7 young from some known series. At least, all indications show that the Peregrines are not nesting at Cape Flattery this year. Saw an Orange-crowned Warbler in the brush. Spent the afternoon preparing the gulls. The Beach Area where the birds are from is also the landing spot, and has the old landing beam on a cliff above it. The beach connects Tatoosh I. with what they call North Island, a smaller rock. Bob



June 21, 1989

says the Peregrines like to ~~perch~~<sup>perch</sup> on a small islet / cliff inbetween North Island and the main island. The route to Strawberry Point (the island to the west of Tatoosh is also over the beach area. Strawberry can only be reached at low tide. From 24:00 - 01:00 hrs we mist-netted petrels again. Beautiful moon rise over Cape Plattery. Caught 17 ~~SP~~ Leach's Petrels & 5 Fork-tailed Petrels, as well as several Cassin's Auklets and 1 Rhinoceros Auklet.

June 22, 1989

Went down to beach area to collect gulls from blind. Shot 2 pairs (DAB 511-514) on 2 shots.

Then went out to Tote Point / the southern edge of Tatoosh Island. Collected two singles on one shot

(DAB 515, 516), but was really trying to get 4 birds on one shot. It was 2 hybrid pairs ( $\delta$  W/H x G/W &  $\delta$  G/W x F/H). Then shot at another pair, got both, but

one bird fell in a cleft & could not be retrieved.

Got its mate though (DAB 517). Then shot the

mate to 515 (518). Spent rest of day preparing gulls.

Liz & Sara found an albino Pigeon Guillemot out at Tote Point. Trapped Petrels at Tote Point again from 24:00 - 01:00 (19 Leach's & 3 Fork-tailed; no Auklets).





June 23, 1989

We just packed everything up, cleaned up and moved to the Beach to await our 13:00 hrs pick-up by Mike & Al in their Dory. Weather was hot & sunny. Ladd found a milk gull, which I caught & collected from Strawberry (OAB 519). Beautiful ride in to Neah Bay. Sad to leave Tutuohi. I had to follow Bob Paine's group in to Seattle because my Reg. N<sub>2</sub> tank was getting too low. Refilled it, Bob helped me with it. The drive from Neah Bay to Seattle (via Kingston Ferry) took 15:30 - 20:10. I drove back to Port Angeles, spent the night.

June 24, 1989

Met Tim Mott at Eagle Air Helicopters in Forks, WA at 11:20. Loaded up in his copter, and we flew out to Destruction Island. Short flight. Beautiful clear, HOT, day. Smooth. We circled Destruction around from the SW, past the light, landed next to the pad. Off-loaded my stuff, and away he went. Expect to be picked up on Thursday morning at 09:00. Today is Saturday. Got my camp set up on the "lawn" near the Water Tower. Saw Bald Eagle as we landed. Destruction Island is rather like a long ovoid. It runs in the long axis SW → NE. The area around the Lighthouse & Foghorn (SW end), as well as the Helicopter landing pad & water tower is consists of carpet-like grass & moss, kept close-cropped by the innumerable small grey/black



June 24, 1989

rabbits. But, aside from these areas, the rest of this flat, table-top like island is overgrown in thick Salmon Berry & brush. The entire Northern half of the island cannot be reached from above due to this vegetation. Indeed, the same applies for the E & SW tip. It might be possible to scramble over the shore to the N end. On the W shore, mid-level, a path leads to the cliff-edge, and from here one can get down to the beach. It's possible to walk from here to the SW end and scramble back up to the foghorn on top.

I did a quick survey. Counted 20 gulls on the grassy, sandy cliffs from the W beach  $\rightarrow$  N, 206 along from the cliffs from the W beach to the foghorn, and 86 gulls on the series of 3 hillocks leading down to the sea from the foghorn. At this S.W. end a series of low rocks, barely larger than the series of reefs, ~~put~~ juts out to the SW end, parallels the hillocks. Here I counted 216 Brandt's Cormorants, on nests, and about 2x that number of Common Murres, also nesting. My immediate impression of Destruction I. is that it is the mirror-image of Tatoosh I., with Western & Western-Gull types being the majority. Off of other birds seen: flock of about 35 obnoxious crows, Song Sparrows, Winter Wrens, Swainson's Thrasher (a veritable population!), the latter 3 all singing, oh, and Fox Sparrows. Pigeon Guillemots, small flock Short-billed Dowitchers.



June 24, 1989~~Resident~~ ~~Area~~ ~~Day~~ ~~Area~~

Counted 17 Oystercatchers on W Beach area & reefs, with 2 nests (1 chick & 3 eggs) on the Beach. I set up my blind on the W Beach (consists largely of heavy pebbles), and marked & weighed eggs ahead of checking morphotypes because so many nests are hatching today! What a hot day, sunny, little wind until evening.

June 25, 1989

Foggy, misty morning. Went to blind at 11:30 to start checking morphotypes. Remained in blind until 19:00. Got data on 35 1/2 pairs. When I left the blind 2 older gull chicks ran from a nest near my tent. One of them even went into the surf. By the time I climbed to the top of the bluff and looked back at the beach, one chick was being killed by another gull. While back at camp from 19:10 - 19:30 the sub-ad. Bald Eagle showed up and fiercely coursed around the SW end of Destruction I with a contingent of screaming gulls & crows in tow.

Went back to the blind with my parabola & recorder.

Took a chick (newly hatched) from pair 20 & placed it in the nest (36) where the chicks had run away.

The adult gulls ~~were~~ were quite upset. The male came up to the nest and pecked at the chick's head, so did the female. The chick was letting out desperation calls.

The pair 36 (both WG) long called a number of times, then walked off from the nest. But then the ♀ walked back over to the nest and sat on the chick.



June 25, 1989

However, the female was seen off it, <sup>actually after ca. 20 min.</sup> whereupon the ♂ came over and started hacking at it. I climbed out of the blind to rescue the bloodied chick and put it back in its original nest (20 - a <sup>WG</sup> ~~typical~~ pair).

Found a larger chick, what I thought to be one of the original 2, and put it in 36's nest. Left the Beach Area 20:15. Weather has turned to heavy mist.

About 65 crabs have accumulated in a local tree to roost. I went to the bluff near the portholes from 21:20 - 22:00 and watched the Rhinoceros Auklets come thumping into their burrows. Some came rather close. Caught one Rhino. Auklet when it landed next to a fence. Beautiful bird. Heard a couple Leach's Storm Petrels around 23:00.

June 26, 1989

Forgot to mention. On first day here I saw and photographed an apparent male, ad. Sea Otter sleeping in the calm water between reef shoals. 08:10 - The Sub-ad. Bald cruised past west end of island.

09:30 - In Blind tape recording gulls. 11:00 - Sub ad.

Bald Eagle flew by, tried to land on a rock but was hit by a gull. Chased away. 11:20 - Collected

3/1 3 gulls on one shot Pair 21 (DAB 520 + 521, both GW/H) and male of Pair 22 (DAB 522, WG).

Then made mistake of trying to collect a pair with the

1/1 410 aux - only got one of them (DAB 523). Then made another mistake when I used 410 aux to get the





June 26, 1989

female of pair 22. Only dinged her. She flew off to a  
ref. I fired w/ 16 G. shell, whereupon she flew off to  
the water & climbed up on a rock. I approached, shot  
again w/ 16 G. shell. Killed her. Waves washed her off  
the rock & she finally drifted in to shore (DAB 524).

Spent rest of a windy but clear afternoon preparing  
the five gulls. During the course of the afternoon  
a different Bald Eagle flew by - this was a bird w/ a  
white head and tail, but the tail had a faint, sub-  
terminal band of brown. This bird showed up at 3  
different times over the course of the afternoon, and  
on the fourth time towards 20:00 it began soaring  
off to the east. The sky at this point was beautiful  
because broken clouds had moved in, and they reflected reddish  
hues mixed with blue patches of sky. Towards 20:00, after  
I had finished dinner and was sitting by the camp  
stove, I heard a commotion and just saw a Peregrine streak  
by at ground height not more than 20 ft away. Barn  
swallows were "chasing" it. The falcon zipped through  
a gap in the shrubs and out over the W bluff above  
my beach. I went to the bluff to search for it, but  
didn't see it. About 1/2 hour later, as I was coming back  
from the bluff, it streaked past me again, going in the  
opposite direction (W → E) low over the island. Definite  
ad. male. About 10 min. later I saw it flapping high  
above the west shore of the island, headed for the SW  
end. It began a partial soar in the wind, coursing

1 bird/  
3 shots



June 26, 1989

back & forth around the SW end Light house. By now the evening sky was brilliant, a mixture of pale blue, soft pink and dark grey clouds. The tiercel Peregrine was the epitomy of a Peregrine, his low form coursing on the wind. After about 1 minute he disappeared low around the SE end. He was blueish on the back, had extensive black barring on lower breast - almost thought he was an imm. the first time I saw him. His yellow feet he had dangled, claws open, while soaring. At 21:00 I went to the foghorn at SW end to enjoy the sunset. Between 21:00 - 21:30 the tiercel Peregrine appeared 3 times, each time he skimmed low over a bluff between the main island and the 3 low hillocks leading out to a reef. He would fly low to the water and disappear around a hillock. Must be hunting the ~~sa~~ Rhinos. Auklets or other birds coming into the island in the evening. On another note, I get the impression that Destruction Island is breeding from all the seabirds. They are literally everywhere. In all the bluffs both above & below. Other birds out here - Robins - one male sings every evening. Rufous - hummingbirds - abound.

June 27, 1989

Forgot to mention - the gulls were not in the least upset by the Peregrine. On the contrary, they even soared with it. 08:00 - 2 sub-ad. Bald Eagles showed up. Moved about the E side of the island. Soared together for a while. Then one landed on the



June 27, 1989

1/0 eastern side. Went to SW Bluffs to note morphotypes, as well as the SE Rocky Landing. Appear to be more hybrids on SW Bluffs (grassy knolls, exposed burrows of rabbits & Anks), more Westerns on the Rocky Landing area. Went to blind on Pebble Beach at 14:00 to collect gulls. Found female dead next to territory 18 (DAB 525), she must have been wounded yesterday and succumbed today. Then tried to shoot birds off nest 23 + 30. Had to use 2/2 two shots (DAB 526-527). Then collected a single bird off a 2 egg nest up on the island proper - off the "~~fuel~~ fuel storage" bin! (DAB 528). Weather has been mixed today, Rain in the morning, partial clearing in the afternoon, then more rain. The sunset was calm, broken clouds. Absolutely gorgeous. Sat near the Foghorn (SW end) to watch the Rhino. Anklets come in. Huge flocks coursing over the ocean to the NW, everywhere I looked with the binoculars, I could see Rhinoceros Anklets flying over the water. Add to this the profusion of Brandt's & Pelagic Cormorants, gulls, and the sea literally "teems" with birdlife. Well after sunset (about 21:30), the Rhino. Anklets begin to thump into the island. Many are carrying finger-size silver fish. They disappear almost instantly into their burrows. Some flared at their approach when they saw me, turned and flew back out to sea. The sunset was absolutely breathtaking - a constant



June 27, 1989

change of colors on the horizon. On my way back to the tent at 10:15 I caught a Rhino Auklet by hand. Beautiful white "whiskers".

June 28, 1989

One other pair of gulls nests up by the helicopter pad. This poor pair has been incessantly "worried" about my presence. The ♀ (a GW-type), and the ♂ (a GW/H), hang around the water tower, and on the ground near their nest all day. The ♀ always comes over my tent to map-map at me, especially when I am cutting up gull. Of their 3 eggs, only one successfully hatched (on June 24-25), and this chick probably isn't getting what it needs. I walked over to it this morning, and it stood erect, spread its winglets, and screamed at me in that chick-like staccato. Quite a defense.

At 09:00 went down to Pebble Beach Area to collect birds. Tried for mate to pairs 23 + 30, but they were gone. Tried for pair 15, but one of the pair took off + flew away wounded, fired again from tent, but missed. (DAB 529). Went back to camp, tried for mate from fuel bin, but only wounded it.

Then went to the Landing Area, at the SE end of Destruction Island. This is the exposed rocky area with the collapsed landing bridge + platform. Shot

8 gulls on <sup>(DAB 530-537)</sup> 7 shots (one shot took out 4 birds), missed on a couple others. Destruction I. has destroyed my shooting area. Spent rest of day, mostly in





June 28, 1989

the tent, preparing gulls. Worked from 13:00 - 19:30 to do 9 gulls. Rained all day, poor visibility. Sunset was not visible. Still, I went to my ~~usual~~ usual spot to watch gulls & auklets. Got very close views of 3 Rhine. auklets as they landed and waited at their burrows right under my spot.

June 29, 1989

Up at 06:30 to begin packing up camp. The weather has lifted somewhat, so I can see the mainland and even parts of the Olympics. I hope the helicopter can pick me up at 09:00. At least it's not raining while I pack the tents. Jim Mott showed up at 09:05. Off I went, probably to the delight of that one pair of gulls with their chick. We circled around Destruction, and I got some nice shots of the island. Drove to Olympia, then Seattle.

June 30, 1989

Went to Burke Museum (after dropping off the car for major left-front drive shaft repair). Met Seewert Rohwer, Dennis Paulson, Chris Woods. Then went to Bob Paine's lab. Talked to him & Min. Koehl for awhile.

July 2, 1989

Came to Friday Harbor, WA on the ferry from Anacortes today. Partial rain. Saw few Rhine. Auklets, 2 Bald Eagles on the ferry ride. After getting squared away, and eating dinner, we (Maren is now with me - I



## Field Notes

July 2, 1989

picked her up in Seattle), we drove out to Lime Kiln Point Lighthouse. Arrived at sunset (21.10). No Bald Eagle, no whales. Although some girls said they had seen Minke & Orcas just before.

July 3, 1989

In Friday Harbor this morning. Lots of Barn + Violett Green Swallows. At the Marine Lab: Juncos w/ fledglings, House Wrens, N.W. Crows, Kingfishers, White-crowned Sparrows, Gulls (GW). Went out in the Scooter at 14:00, headed north to Gull Rock & White Rock, both north, north-east of Flattop I. Lots of boats on the water. Too many to collect at the gull colony on Gull Rock. Actually, it seems as if fewer pairs are nesting there this year (maybe 12 pair on the NE side of Gull Rock. Oystercatchers also around. We drove across the strait to White Rock. Here, more <sup>1/5 shots</sup> pairs of gulls - all appear to be on eggs. When most boats were clear, I got out my new (used) Stevens 16 - Gauge. Little rusty with my aim - 5 shots for one bird (MAB # 538). Large assemblage of Harlequin Ducks on White Rock (20-25 birds). As we were waiting off the rock, a pod of Orcas moved through the strait. Several did spy-hopping, one played in kelp. One big daddy, couple smaller males, and assorted females. Three boats followed too closely. We were back at the lab around 16:30. ~~At 21:00~~



July 4, 1989

6/11 08:45 - 11:00 - In the Scooter to Colville I. Overcast, some rain & wind, but the water stayed pretty calm. We drove the back way there → around Lopez I, and the quick way home. Saw several groups (2-3) Marbled Murrelets, many Rhino Analets and ~~quite~~ about 6 Bald Eagles in all during the trip. A few D-L Cormorant nests on Colville I's ~~west~~ south side. Collected 6 gulls (DAB 539-544), first shot took 2 gulls, but rest were singles and many misses. Most gulls on Colville I. appeared to be on eggs. Saw a pair of Heermann's Gulls on the Marine Lab dock. Drove out to Lime Kiln Point, San Juan I, towards evening. Heard Swainson's Thrushes, saw Rufous-sided Towhees, one ♂ Red-tailed Hawk, Calif. Quail, and Savannah Sparrows. Forgot to mention - at 4th July parade in Friday Hbr., a pair of Violet-green Swallows had their nest of 4 young wedged inbetween some metal plates of an eve to a store. The parents still tried to feed offspring, but often did not zoom in over the heads of all the bystanders on the sidewalk. Nice fireworks display in Friday Hbr. on the eve. We had a great view from the Marine Lab. Could hear Common Nighthawks.

July 5, 1989

From 08:45 - 10:15, drove in the Scooter from Friday Hbr. north to White Rock near Flattop I. <sup>C San Juan Co., WA</sup> Collected 4 birds on 5 shots (DAB 445-448). Back out to Lime Kiln Point, San Juan I, for the sunset.



July 5, 1989

Sat from 20:00 - 21:30. Large Pod of Orcas came by before sunset, swimming N → S. Two big daddys (we ID'd them with the guide) as well as several groups of smaller Orcas and many individuals. They seem to travel spread out. Each old bull had 2-3 others with them, but many came past in 1's and 2's. In all, probably 15 orcas swam past. Quite nice.

July 6, 1989

Sunny, clear. Wind picking up. We left in the Scooter at 08:30, headed for Cattle Point and possibly Smith I. When we got to Juan de Fuca Strait it looked like mesh hour. A million gill-netters out (start of salmon season?). Had to work to avoid net. Decided to cut up to Bird Rocks around Lopez I. At Bird Rocks, in the Rosario Strait between Thatcher Pass + Anacortes, we collected 5 gulls on 3 shots (OAB 549-553). Better average. Got a nifty hybrid, too. A long gill net was entangled around the S end of Bird Rock. I dropped Maren off on the island, and tried to free up portions of the net, but it was all too deep & extensive. Maren was able to free a small shark. Lots of seals on Bird Rock. On our way back to Friday Hbr. we saw a medium-sized flock of ~~black~~ grey-headed





## Field Notes

July 5, 1989

and whiteish-headed Barnapart's gulls.

July 7, 1989

Took ferry from Friday Hbr., WA to Sidney, then on to B.C.

July 8-9, 1989

In Victoria, B.C.. Ted Miller put us up at his house. Met Rob Canning (of Okanagan, B.C., and coauthor of the book "Birds of Okanagan". As usual, Victoria had lots of gulls at roof-top level. Rain on Saturday, clear on Sunday.

Profusion of crows, starlings. Saw one Bald Eagle near Cattle Point. Rob Canning lives at S end of Oak Bay, on the water. Beautiful view.

Chain Islands protect the bay. Good gull colony on one island (visible from Oak Bay Inn). Saw Long-billed Dowitcher, Killdeer, Calif. Gulls on ~~at~~ Oak Bay shore.

July 10, 1989

Drove from Victoria, B.C. to Bamfield, B.C., on Barkley Sound. Intermittent drizzle, but clearing. Sunny when we arrived in Bamfield (~4.0 hours). ~~July~~ Enjoyed beautiful evening on the dock:

Barn Swallows nesting, feeding young. Also fledged young barn swallows. Saw one Black Swift, several ~~other~~ Vaux's Swifts. Bald Eagles (pair + sub ad., + imm). Kingfishers, Great Blue Herons.



July 10, 1989

working the inlet's edges. Picked up a road-killed common Nighthawk on highway near Lake Cowichan (DAB 554).

July 11, 1989

Had to drive to Port Alberni to get a firearms permit. The boat guy at Bamfield (Steve) has been very helpful. He called nearly everyone in Bamfield to ask if it is possible to get a permit in town, but no go. ~~So~~ so off we drove to Port Alberni. Nice sunny, warm day. Dirty road. Talked with the secretary of the Conservation Officer in Port Alberni. She called the head C.O. in Nanaimo to ask if I needed a Hunting License (60.00, non-resident) or just a firearms permit (10.00). Turns out, I only needed the latter. Last year, Larry Johnston in Campbell River said I needed a hunting license.

July 12, 1989

Maren and I went in the UBC Boston Whaler to Baeria Rocks for gull collecting. These rocks are located way up Barkley Sound. There are ~~two~~ three main rocks, all are relatively small. Probably not more than 40-45 Glaucous-winged Gulls <sup>pairs</sup> were nesting. All gulls appeared to be incubating. Funny, but we could not entice the gulls with bread. About 200 gulls ( $\frac{1}{2}$  California,  $\frac{1}{2}$  imm. GWC) loafed on the rocks. Also saw 1 Heermann's Gull, about 20 Harlequin Ducks, and several Black Oystercatchers. Collected 5 gulls (DAB 555-559) on 8 shots. We



July 12, 1989

had left at 09:00, returned to Bamfield by 11:00. Then went with Alan Burger's seabird class @ 13:30 on the MV Alta for a trip to Seabird Rocks. But the weather turned very windy, and we turned back because of high waves outside of Barkley Sound. Went instead back to Baeria Rocks. Along the way saw several Pelagic Cormorants, Marbled Murrelets, and Bald Eagles. Rain came in.

At Baeria Rocks we saw, in addition to the species already mentioned: 3 Short-billed Dowitchers, about 15 Surfbrids, and a couple Black Turnstones. Weather was quite rainy today.

July 13, 1989

2/2 at 09:30 Maren and I went in the UBC whaler to Seabird Rocks. These rocks are in the ocean ~~near~~ SW of Cape Beale. Beautiful sunny day, and relatively calm ocean. Collected 2 gulls well away from the rocks (PAB 560, 561) on two shots. We could see Washington to the south (Cape Flattery). A smaller-sized Grey Whale followed us as we pattered about in the water to the lee of the rocks. Lots of sport fishermen out in boats. Rhinoceros Auklets + Marbled Murrelets on the waters. Several Tufted Puffins crossed our bow. Seabird Rocks are also rather small. But there is some grass topping what looks like a pile of boulders. Just a gorgeous day. The cliffs at Cape Beale don't look to bad. May have had Puffins at one time.



July 14, 1989

We drove from Bamfield to Port Alberni, then on to Nanaimo. Took Cristie (a Dane) with, dropped her off at the ferry. I managed to drop my specimens off at the Pacific Biol. Station in Nanaimo. Also got some  $\text{ly. N}_2$ . Mr. Bill Ross was extremely helpful. He took  $1\frac{1}{2}$  hours of his time to locate the  $\text{N}_2$ . Bill is Admin. Head at the Station. We then left Nanaimo for Tofino. Nice drive over the highway. Not bad for a Friday evening. In Tofino the Mimi Motel had no vacancy, so instead we went to The Pacific Breeze Motel (Wii Spruhen Deutsch). Mistake. Lousy place, and they woke us up at 4:00 am playing loud "Heimat Lieder" in the bar.

July 15, 1989

Met Dave of Nootka Charters at the Crab Dock. Called Rod Palm up, and he agreed to take us out to Cleland Island at around 13:00. Actually picked us up at 13:30. Calm, slightly overcast day. Slow, nice ride. Rod took us first to Ahous Bay, along way we saw 4 River Otters. In Ahous got a good view of a Gray Whale. Lots of <sup>2</sup> Heermann's Gulls, <sup>More Marbled Murrelets, Rhin. auklets</sup> Marbled Murrelets! Then on to Cleland. Shot

5/7

5 gulls (DAB 562 - 566) on 7 shots. On the way back Rod took us to his boat house. 2 of his kids accompanied us (Pearl ♀, + Shell ♂). Met Rod's wife Sharon. Really a unique family. They live on a large lugger boat





July 15, 1989

on an island in the bay across from Tofino. They raised kids<sup>3</sup> on the boat. Red is active in all sorts of things, driving for archaeologists, govt type, etc. Sharon takes people over to Meares Island (11.00 per person, 1.00 of which goes to the island defense fund). She earned 13.00 last year doing this. Anyway, we looked at their Kingfisher which the kids had seen smack into a window, then Red brought us back to the dock. He charged me only \$30.00 for the trip. I did up the gulls on the crab dock. Started raining towards evening. Maren and I got a room in the Mini Motel. Nice view of the water, great roomlet under a peaked A-frame roof.

July 16, 1989

Stayed in Tofino today. Rained all day, cleared a bit towards evening. We hiked along Long Beach in the afternoon. About 600 Calif. Gulls were loafing on the beach, along with scattered G.W.G.s. In the evening we sat on the dock and watched the G. Blue Herons, Bald Eagles + Crows wander past.

July 17, 1989

watched an excellent ♂ Western Gull on the docks at Tofino this morning. He was bossing other gulls around.

Drove this afternoon from Tofino to Oyster River, B.C., after we had spent the morning in Tofino and talking to Dave of Nootka Charters. We saw Tiger Lillies at both Passes between Tofino & Parksville. Arrived at the University of B.C. Research Farm, which is just north of the mouth of the Oyster River. Lots of Bald Eagles.



July 18, 1989

On our way in from the Farm to Campbell River this morning to contact RCMP, CO + get money.

Rained last night, but clearing this morning. Sunny.

On the trip back from Campbell River to the farm we counted 15 Bald Eagles. Drove out the Research

Farm's road to the fields just behind the beach + nature trail. SE winds mild. Many gulls cruising

low from the north over the farm. They tend to get funneled by tall trees to this point. First

couple shots missed. Collected 4 gulls (DAB 467-470), but I had hit some others, but couldn't find them after

they had flown way out over the water. However, we went for a walk on the beach at sunset,

and found 2 fresh dead gulls, obviously my wounded birds (DAB 471-472). So in all, with

6/9 this luck, 6 gulls on 8 shots. The UBC Research Farm consists of open fields + stands of riparian woods.

White-crowned Sparrows, Robins, Flickers, Barn + Violet-green, Tree Swallows, Pine Siskins,

Swainson's Thrushes, House Wrens, Starlings, NW Crows, Ravens, Bald Eagles all nest on the

premises. On the water we observed a flock of about 40 Red-breasted Mergansers feeding. Great-

blue Herons "float" by every now + then.



July 19, 1989

Out at the fields next to the Beach & Nature Trail, collecting gulls at UBC Research Farm, near mouth of the Oyster River, Vancouver Island, B.C. Weather clear, sunny, & still. Few gulls flying by. From 11:00 - 13:00 only a handful, and every time one was in range people were nearby on the trail. I'd tell people that I was collecting gulls for toxic studies, and that pleased everyone. "Goat Hunting" came the reply. Wounded one gull, but it flew on to land near at the mouth of Oyster River. I chased it back & forth across the river, but could never get closer than 6' before it would flap away. Came up.

While waiting for more gulls an ad. Sharp-shinned Hawk cruised at tree-top level past me, with about 5 protesting Barn Swallows in tow.

At 12:30 I saw a flash come streaking in from the north, then turn in a wide arc at head-level around behind me to rocket into some shrubs on the beach - it was a Black Merlin.

Very clear - very dark bird, darker than an imm. peregrine on the back. It either scared up some starlings or it was chasing a handful of them.

I couldn't tell, it happened so fast. Three starlings flew out of the row of bushes, but I never ~~the~~ saw the merlin again. Spotted Sandpipers on the beach at low tide. Calif. gulls also moving about. Collected 5 gulls on 7 shots (DAB 573-577).



July 19, 1989

Maren counted 15 Bald Eagles at the mouth of the Oyster River today. I went back to the mouth after collecting the other gulls to search for the one wounded gull. Could not find, in spite of the extensive exposed bars at low tide. An eagle probably caught & ate it. Tonight we walked the beach along the farm from the mouth of the Oyster River north. Saw one bat, and several nighthawks coursed around us at ground level. They were almost bat-like at such a low height. Odd. Also scared up a killdeer.

July 20, 1989

Finished stripping gulls at the house. Several Glaucous-winged gulls came by to investigate. I even tossed some gull meat on the roof of the neighboring house, which was gobbled up by them, although <sup>one</sup> of the gulls did not seem to like the taste.

In the afternoon we drove on to Port Hardy. Met Tex & Sammie Lyon at their home on Beaver Harbor in the evening. They invited us to stay, in spite of having ~~just~~ guests just leave. Rain off and on.

July 21, 1989

I contacted the C.O. ~~John~~ <sup>Lloyd</sup> Sunquist at Port Hardy (off. 949-6272, h.m.: 949-6306). Nice fellow, youngish.

He made some suggestions for getting out to collect off colonies. Unfortunately, he had a boat last week, and had been zipping around with the Calif. Peregrine people, taking egglets for the reintroduction program down there.

Grant Scott      District Supervisor  
DFO      Campbell River.

Greg Savard

215 - 950 Alder St  
C.R. B.C.

~~Alistair~~

V9W 2P8

Alistair Thompson, DFO

Box 10

(km) 949-8210

Port Hardy, B.C.

VON 2P0



## Field Notes

July 21, 1989

They took 10 eaglets. Some nests had young too near fledging to take, others had 2½ week old young. Wide range of ages. Most eagles were taken from the area & islands around Gordon Channel. Also heard the Peregrines in the Scott Islands appear to be holding their own. Anyway, Mr. Sengquist gave me the name of a fellow in Winter Harbor to contact (Dennis Grant BC tel 2191), and the BC fisheries people { (Greg Seward 949-6422) 7070 Skenechiff; & Allister Thompson (hm 949-8210) }. I stopped by their office in the afternoon, and Mo. Seward said he thought Thompson could take me with on patrol tomorrow to collect gulls.

We had another great dinner at Tex & Sammie's, after picking cherries for them, and enjoying good conversation and company. Turns out, Tex's parents were the original Lyon-family founders of Port Hardy. Rained pretty much all day today.

July 22, 1989

Met Alistair Thompson at the Dept. Fisheries & Oceans office in Port Hardy @ 08:00. Nice fellow, young. (Should say, I woke 04:00 when Tex got up. Couldn't go back to sleep, so I got up @ 05:00. Beautiful sunrise over the main land mountains. Great view from Tex's kitchen window. Tex & his friends went off fishing @ 06:00). Anyway - Alistair & I launched the Hurricane w/ 70 HP Johnson outboard. Alistair did his patrol. It was very foggy just out of Port Hardy (Hardy Bay and Goletas Channel)



## Field Notes

July 22, 1989

By ca. 10:00 the fog began to burn off. Alistair (a Scot) was very polite, engaging the fishers in light conversation while checking them. Many seemed to know him. At 10:00 we stopped at Klavi's boat (chartered by DFO). A beautiful rebuilt 1929 harbor boat. By about 11:00 we were headed further north, through the islands between Coletas Channel & Gordon Channel. Very calm, clear, sunny weather. We traveled past Christie Point (Light Station) and north into Queen Charlotte Strait. Many Rhinoceros Auklets, most as individuals, on the water. We headed first for the Buckle Group (islands where CWS said 66 pair of GWB's nested in 87). When we got to the rocks, didn't see a single gull, just Bald Eagles, one on each of the 5 or so odd rocks. Went north to Pine Island & Tree Islets. The Steron Rocks were also visible, guano capped, direct due north, but I saw gulls on Tree Islets, so we went there. Tree Islets had gulls in pairs, and loafers, plus a couple Bald Eagles. I would estimate 20-~~30~~ pairs, at best. At my first shot ~~we~~ we heard the mate scream of a Peregrine Falcon. What a thrill. The first glimpse we got was of a possible imm. (1<sup>st</sup> year?) moving towards Pine Island, then in the course of collecting gulls, an adult tiercel showed up over us screaming. The imm. falcon (a ♀) following. Good view of both, but I just could not be certain if the imm. was an excess of this year or last. It sure flew well, and didn't seem to be "young". No molt visible, however. In all, I collected 6 gulls on Tree Islets (DAB ~~578~~ 578-583), located near



July 22, 1989

Pine Island, in Queen Charlotte Strait, B.C.. During the shooting about 60 GWC's were scared up from the rocks.

Black Oystercatchers (a pair) was also present. Alistair

Thompson had to drop me off on the kelp-covered rocks so

6/8 shots I could pick up a couple gulls. Fired 8 shots for 6 birds.

On the trip back we passed about 1000 northern phalaropes, feeding on the surface near a large kelp bed. The

weather stayed unbelievable clear and calm. In the afternoon

I did up my gulls at Tex & Sammie's. Tex had been

successful fishing, so we were treated to a show of

Bald Eagles picking up & lichening over fish scraps off

the beach. At one point, 5 eagles stood on the beach,

eyeing one another over a fish head.

July 23, 1989

Up at 07:30. During breakfast at Tex & Sammie's we saw an eagle chase an osprey over Beaver Harbour.

At mid-morning I went with Tex in his boat out

on Beaver Harbour to pick up his crab pots. Three

Glaucous-winged Gulls on the beach (!). Forgot to

mention, ~~to~~ the night of July ~~21st~~<sup>21st</sup>, I recorded 2 GWC's

on Tex's beach. They were moving the longest time

with one another, long calling, etc. I thought they were

trying to pair, but at one point they started fighting,

grappling, etc. Then they spent a long time "grass

pulling. Komische Vögel). On our trip around

Beaver Harbour saw Red-throated Loons, Surf Scoters,



## Field Notes

July 23, 1989

Kingfisher, Surf-bird (few), Western Sandpipers (small flock on the beach), and even 4 Red Crossbills on Deer Island. Heard Pine Siskins back at Tex & Sannies. Drove out to Winter Harbour from ~~Port Hardy~~ Port Hardy. Everyone said the road was terrible, but it is actually better than the Bamfield Road. Stopped at Kains Lake along the way, saw 2 imm. ♂ Red-tails screaming for food. Robins were around, too. Most of the ~~the~~ road goes thru logged areas. In fact, the only real intact areas of forest are along the road just outside of Holberg, and just before you get in to Winter Harbor. We went right to the Fish docks to ask for Dennis Grant (a Fish Buyer), who was trying to hook me up with a boat ride. He was very busy, but suggested I go talk to an old fellow at a cottage on the beach. Went there, but it didn't look too encouraging. Maren & I went back and set up camp at a beautiful spot - one of the nicest campgrounds I've ever been on. It's a "free" campground ca. 1/2 mile out of Winter Harbour. Bald Eagles, with fledged, screaming young nearby. Crows w/ fledged young everywhere. Went back to Dennis Grant, and he suggested I contact Michael Moore, @ Moore logging. ~~The~~ Their operation is near the campground. Went over & met Michael, a very friendly chap. Lives in a custom house, with his wife (from Paris). He agreed

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July 23, 1989

to take me out tomorrow @ 11:00. Beautiful sunset and evening camped on the east shore of Winter Harbor. I managed to record several Swainson's Thrushes. Belted Kingfishers hunting out on the water. A few Calif. Gulls, Great-blue Herons, Rufous Hummingbirds about. Chestnut-backed Chickadee families foraging thru the trees. Winter Wrens also around the campground. Beautiful weather.

July 24, 1989

Had breakfast at the only restaurant in town. Saw Wilson's Warblers foraging near the restaurant. Common Loon called several times last night from the waters. Met Michael at the fish farm at 11:00. While we were talking the crows foraging on the mud flats jumped up squawking, as did a group of 5 Calif. Gulls. Out of nowhere zoomed an ad. Tufted Puffin. He obviously zipped up the Winter Harbor inlet, heading north, and flew low over the fish pens to chase up whatever was on the mud flats. He zoomed up from a low altitude and made a few shallow stoops at the crows, not in earnest. Then he was gone. So Michael took the visiting lady from Paris, his son, & Maren and I in the boat. We went down past Winter Harbor out into Quatsino Sound, towards Gillam Islands. Gillam Islands are a series of rocks, rather large & steep, at SE side of Quatsino Sound. One island is quite

in  
f

July 24, 1989

large and partially forested. The weather was clear, sunny & calm most of the day. Water was smooth, and not until we reached the islands did a mild swell appear. Michael said the Villam Islands are almost always exposed to a large swell and open ocean. There were lots of loafing gulls about, both sub. ad, imm. Calif & G.W. The more rocky portions of the islands had gulls evenly spaced around, and, as the CWS determined in 1987, there probably are ca 650 pair of Glaucous wings. But also at least 1,000 - 8 gulls/12 shots 1,500 loafing gulls. I collected 8 gulls (584-591) on 12 shots. The weather was just beautiful. On our return to the fish farm we saw Rhin. Anklets & Tufted Puffins, as well as Bald Eagles. I was surprised at how open Quatsino Sound is. It is wide in a N-S direction, but relatively shallow and exposed to the ocean. Back at ~~the farm~~ the camp I prepared the gull. We bought a 4 lb salmon from Michael, and cooked it over the barbecue along with baked potatoes. Delicious dinner.

July 25, 1989

Drove back to Port Hardy, then down to Campbell River, BC. Picked up gulls at both places.

July 26, 1989

Went to Vancouver via the ferry at Nanaimo. Picked up gulls at Nanaimo. On the ferry out of Departure Bay, saw gull chicks on one of the rocky islands off Nanaimo. Chicks were almost



## Field Notes

July 26, 1989

3/4 the size of adults. Good sized Cormorant colony too. Lots of GWC's in Vancouver. Stayed at UBC married student housing. Phillip T. and Claudia Beavers w/ children also running a Bed + Breakfast. Beautiful housing.

July 27, 1989

Spent day running around Vancouver, getting gulls + vials deposited, buying liq. N<sub>2</sub>, etc.

July 28, 1989

Spent first part of day running around Vancouver getting air-freight stuff off. Had to go to 2 diff. people before I found someone who could fill out my liq. N<sub>2</sub> "dangerous goods" shipping form. Saw Naren off at the airport. Flew to Sandspit, Queen Charlotte Is. Beautiful flight, right over Campbell River + Mittleman I. But more cloudy north. No view of central S. Moresby coast as we landed. Met David Putterill @ Sandspit airport. Beautiful clear, sunny, warm day.



# Field Notes

July 30, 1989

Left Sandspit in Dave's boat @ 11:30, but after we rounded the point and passed the airport ~~me~~ the motor overheated (New Johnson 45 hp).

Needed to get a lower pitch propeller, so returned to Sandspit. Left port at 15:00. Wind S to SE, but waves not bad. Motored down past

Gray Bay to Cumshewa Island, where I collected 6 gulls (DAB-592-598). In all, about 60 GWC's on Cumshewa I, small flock of loafers and about 25 Calif. Gulls. As we approached the island we

began to see more birdlife - Rhino. Auaulets, 2 Marbled <sup>Murrelets</sup>, Cassin's Auaulet. Looked like just a handful of GWC's were "spaced" on territory, but after I started shooting, quite a few birds got up. Cumshewa I. is all large square rocks piled up. Surprisingly, I got 5 gulls w/ brood patches! Still on eggs?

Didn't see any chicks. Large kelp beds nearby.

Oystercatchers on the rocks, too. We then headed ~~to~~ Cumshewa Inlet around Louise Island to Louise Narrows, where we stayed at a Fisheries Cabin.

Beautiful place. <sup>Arrived @ 17:30</sup> Bald Eagles (young begging). Crows, Ravens, Chestnut-backed Chickadees, Kingfisher, Ruby-crowned Kinglet. Moss carpeted creek. ~~to~~

The cabin is thru Carmichael Passage, right where Louise Narrows are located on the map. Northern

~~Sea Lion~~ ~~swam~~ Sea Lion swam past. The crows arrived just before sunset, ca. 150, then left after





## Field Notes

July 30, 1984

sunset. Mark & Jan Walsh & daughter & friend arrived on their way to Windy Bay. Motor trouble, but Dave fixed it. They camped at the cabin. Rained all night. Mouse hopped in the milk carton, swam around for quite awhile.

July 31, 1989

Foggy morning, but looks like it might clear. We didn't get off until ca. 12:30. The fog turned into a light mist, then rain. Beautiful drive out Selwyn Inlet, saw about 4 Bald Eagles. Selwyn Inlet runs between Louise & Talunkwan Island. Dave said he had helped log Talunkwan I. back in the early 70's. It is now nearly completely denuded (those were the days without any regulations for road placement, slopes, etc.). Arrived at Kingsway Rock at the outlet of Selwyn Inlet to Lasheck Bay. Pretty rock - lots of greenery: wild strawberries, a type of bluebell flower, and an orangeish flower. Kingsway Rock was quite variable in terrain, with many sizes of rock, and several pools of fresh water. Roughly 50 Pigeon Guillemots were in various places, one flock of 20 on one spot. Ca. 40 pairs of bluntnose-wings were scattered about the rock. Found 1 nest w/ 1 egg, and an occasional empty nest. Gull nests were widely spaced. Of all the adult gulls, saw only about 6 fledged chicks. Found 2 freshly eaten chicks - one gets the impression that the eagles are cleaning them up. We decided to collect from land. I was able to shoot 6 gulls on 5 shots, but used another 2 shots to



## Field Notes

July 31, 1989

finish off wounded birds in the drink (DAB 598-603).

Other birds seen at Kingsway Rock: Oystercatchers (few), Harlequin Ducks (2), imm. Pelagic Cormorants (6).

We then headed across Lasbek Bay, well south of Reef Island, to the Lost Islands, a group of trees + bare small islands ca. 3mi NE of Kunga Island and Lyell Island. An imm. Bald Eagle was sitting on a

4/7 snag @ Lost Islands. I collected four gulls (DAB 604-607) at the Lost Islands. <sup>ca. 30 birds total.</sup> Half-grown chicks were visible on the bar rocks east of the large tree island. These

chicks were definitely younger than those of Kingsway Rock. We then headed south, past Fuller Point (an

Ancient Murrelet colony) on Lyell Island, past Tar Islets & Windy Bay to Muchesan Island. We motored

in thru a narrow entrance into a beautiful lagoon.

Extremely narrow entrance, Dave had to gun the boat and shoot the tidal flow. Sharp left turn past the

entrance. The lagoon harbours the old homestead of Adrienne & Remy Geigy.

We set up in their guest cabin. Evidence of where their house boat was moored, garden & greenhouse still there. Got chives from the garden, even though it hadn't been tended for 2

years. Ravens, Great-blue Heron, Kingfisher, Chestnut-backed Chickadees. Worked on the gulls from 17:00 -

21:30, except for a dinner break of fresh-smoked salmon.

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August 1, 1989

Up at 08:45. Mark, daughter Lorraine & friend Civa came by. While finishing the gulls at my workbench heard a couple Red Crossbills fly by. Winter when scurrying about the brush. Saw a black rat in the cabin, since fellow who danced on our heads last night.

We went out looking for gulls ca. 13:30. First to ~~agglomerate~~ <sup>agglomerate</sup> Rocks (no gulls), then north to Far Islets. Lots of Pigeon Guillemots along the way. Saw 2 deer on one of the outermost rocks (no forage out there). Gulls were on one of the innermost rocks of the Far Islets, rather close to Windy Bay. I estimated ca. 40 ad. gulls, and  $5\frac{2}{3}$  shots  $< 10$  fledged chicks. Collected 5 gulls (OAB 608-612).

We drove back to Murcheson I., where I worked on the gulls. Saw a Hermit Thrush at camp. At 17:00 we went over to Windy Bay, met Haida Guardians Wiles & Brubay, as well as Mark's group. Had delicious stew in the longhouse. Watched eagles & ravens picking scraps from the beach. Was talked of Peregrines, too.

We left at about ~~to~~ 22:30. Beautiful ride back, calm, overcast. Magical scenery. We passed about 4 gull chicks on the <sup>open</sup> water, and a group of about 13 ad. gulls. The motor kept conking out on the water. Overheat, or fuel problems. To get back into Murcheson Lagoon Dave had to cut the motor and let us drift thru the entrance. Low, incoming tide. The oars would strike phosphorescent ~~bed~~ trails. Beautiful. We lugged the boat good on a rock.

John Wier / Susan Cohen

Box 265

Q.C.C., VOT 150

Marine Op. Prince George B.C.

ask for Cape St. James Ch. #24.

- JMH N139408

So. Wd. F 7-9pm

August 2, 1984

Worked up the gulls + wings. for most of the morning + early afternoon. Weather mostly sunny, some mixed clouds. We left the lagoon at Murcheson Island around 16:30. We circled the outside of Murcheson, ~~over~~ past Hot Springs Island and curved around the SE point of Ramsey Island into Juan Perez Sound. Nice cliffs on SW side of Ramsey Island. The boat motor cut off in the sound at mid-way point. Turns out, it was a clogged fuel filter. We pushed on thru Burnaby Strait + Narrows, weaving thru rocks in a "river" of salt water. Then out Skincuttle Inlet, to the south of which the abandoned Jedway Iron Mine near Jedway Bay on Moresby I. was visible. We continued south past Ikeda Mt. + Goodwin Pt., going thru the lee side of Rankine Islands across Carpenter Bay. The numbers of seabirds began to increase. We skirted around Benjamin Pt. + Garvin Rocks did not appear to have any gulls on it. We entered Rose Harbor Inlet, between Moresby I. and Kunghit I. The weather was calm, smooth, light overcast. Got into Rose Harbor ca. 19:00. Rose Harbor consists of a few "settlers" and their houses, placed on the old whaling station property. The station ceased operating ~~about 25~~ in the 1940's. We went to John + Susan's house - a veritable mixture of brick floors, wood walls, and greenhouse. Tremendous garden. They have 2 boys, Aaron + . Jill was visiting, as were a couple whale biologists from the Island Rose.





## Field Notes

August 2, 1989

Had a great dinner of salmon and fresh vegies with salad.

August 3, 1989

We planned to reach Cape St. James. Dave, John (from Rose Hbr) and I left in the boat from Rose Hbr heading down the east side of Kurghit Island. It was clear & windy, but the station at the Cape reported 0.8 mi visibility. We passed to the lee of High I., then to the outside of Rainy Islands, where a substantial number of GW Gulls were in residence (ca. 50). At the peninsula between Rainy Is. & Gull Islet, I saw an ad. Peregrine stooping on something in the water. I shouted, so we dashed over. As we approached 2 young of the year lunched off some trees, ~~and~~ one was chasing & diving at the ad. ~~falcon~~ bird (a tiercel), the other flew almost kestrel-like off over the rocks of the peninsula. The ad. gave up stooping, circled back and landed in a snag on the treeed rocks above us.

Beautiful dark, thin tiercel. He stood very straight. We dropped John off at the rocks below for him to pick some goose-neck barnacles. The tiercel ad. flew over to another snag, and soon thereafter an imm. falcon headed over our heads. This point doesn't have any substantial cliffs on it, although there is a steeper cliff about 1/2 mi. S. We continued on our way, but the fog was getting thicker. Nice gull rock at Lyman Point (Lyman Point Islet), with nesting GW's, Tufted Puffins, also Pelagic Cormorants ~~mostly~~ resting. Passing Luedana Bay



## Field Notes

August 3, 1989

the birdlife really increased. Whole flocks of Tufted Puffins, Ancient Murrelets, Pigeon Guillemots, Cormorants couring low over the water. Even saw several Sooty Shearwater.

A really thick fog ~~back~~ bank hung over Annis Point, and when we entered it we could go no further.

We turned around and headed back north. Stopped off at Rainy Islands, where I was put ashore with John. Saw a Peregrine sitting up in a snag, ~~but~~, but it was pretty far away, and I couldn't tell if it was an adult or not. I then collected 6 glaucous-wings (DAB 613-618) on 6 shots (1 double, 1 miss).

<sup>6/6</sup> ~~Note~~ No chicks were visible on the island. On one of the other rocks a Bald Eagle's nest contained 2 young, still a way from fledging. We returned to Rose Harbor. The weather worsened. I prepared the gulls. Saw Song Sparrows in the garden. Kingfishers working the harbor. Around 17:00 Dave & I hopped in the boat and went to Anthony I. to see the Haida village remains of Ninstints. We went out the Houston Stewart Channel, past Flatrock I. (with many gulls > 100 pr.). The fog was thick, so we navigated with compass.

Arrived at Ninstints. Very awe inspiring. The native let us on even though I had forgotten my permit.

Saw Varied Thrush, very dark Fox Sparrows, Townsends Warbler and deer on the island. Also Winter Wren + Ruby-crowned Kinglet. Upon returning to Rose Har. we found Ron Hooper & Bob Redhead of the new South



August 3, 1989

Moresby National Park Reserve having dinner with ~~the~~ Sue + John, as well as some fisheries people. I kept quiet until I could ~~directly~~ introduce myself to Bob Redhead. He is the one who gave me "verbal" permission at my own ~~own~~ desperation to collect in the Park. He suggested I remain discrete. So nobody mentioned gulls that evening. <sup>While taking a hot bath outside at 2400 I heard Leach's + Fork-tailed Storm Petrels in the inlet off Rose Harbour</sup>

August 4, 1989

again, John, Dave + I headed out east and south to attempt to circumnavigate Knight Island and get to Cape St. James. Beautiful day, clear, sunny and calm. Stopped at Gull Islet to watch the gulls, puffins and cormorants. Some nearly fledged <sup>GW's</sup> GW gull chicks on the islet. Probably ca. 40 birds total. Loads of seabirds again. It is really striking, I did not see nearly as much seabird activity anywhere else on the east coast. The difference is like night and day. The southeast coast, well, the entire southern tip is Teaming. Gull Islet in particular appears to have many puffins, and L'Anse Bay had "flocks" of 40-50 puffins moving about. It was so clear we could see the Herouard Islands at the Cape. We went past Anson Point, and it was a straight shot to Cape St. James. The weather remained calm. We arrived around 12:30 at Cape St. James Island, ducking there and ~~back~~ walking up the 1000 stairs to the meteorological station. As we were going up the stairs I saw a Peregrine soaring on the wind above the island. Also saw what looked like an Orange-crowned Warbler. At the top, we



August 4, 1989

were treated to a magnificent view of the Cape. Kerouard Islands off to the SE, St. James Island itself, and the Cape. <sup>St. James</sup> ~~These~~ islands ~~are~~ is striking because ~~they are nearly~~ it is nearly devoid of trees, and the Kerouards lack all ~~the~~ trees. What a contrast in the Queen Charlottes. The Cape islands resemble more the Aleutian Islands! The meteorological station is incredible - a wonderful set-up. They have big picture windows to the S, E, & W. The house is clean, comfortable, and well equipped. As we said hello to Pierre, I saw 2 imm. Peregrines and 1 ad. coursing about the island, circling around the various high towers and ruins. We were treated to fine views of them. I noticed that imm. Peab. Peregrines are hard to tell from adult at certain angles from below because their breast & belly are so dark. They give the same "white-throated & upper breast" appearance as the adult. Watched an imm. make several stops, screaming, at an ad., probably a tiercel. Got good views of the tiercel ad, yellow feet & cere, very slaty back and head, almost blueish (not as black as Calif. Peregrines at the malin and cap). The imm. had rather light heads, some blond streaking on the eyebrow. Every so often one would power out over the ocean. Bald Eagles were also present in good numbers, to the gulls' consternation. Watched an ad. Bald chase a sub-ad. Tremendous rolls, with talons nearly meeting. The





# Field Notes

August 4, 1989

eagles made it look easy. There is a large colony of Glaucous-winged Gulls on St. James Island. They are nesting on the steep cliffs and grassy slopes, as well as broken rocks on the W, S & SE side.

After tea & a manana bar, we said goodbye and went down to the boat. Saw fledged song sparrow.

We motored over to the SE slope of St. James Island, and I collected 9 gulls, getting 2 in the air with 1 shot. Very nice, because I didn't see 2 in my line of fire, and ~~each~~ <sup>each</sup> gull fell on either side of the boat! (DAB 619-627).

9/12

We then went thru the flowing narrows between St. James I. and Kerouard I, and headed up the west coast of Kunguit I. Good swell, and fair winds contributed to a pounding ride. Loads of seabirds. Good Peregrine cliffs on all the islands, St. James SW slopes, Kerouard SW slopes. A couple good cliffs on Kunguit I. at I think Barber Pt. and the N. end of Gilbert Bay, possibly Bonles Pt., too. Saw several groups of Sooty Shearwaters, and large flocks or groups (20-30) of Rhinoceros ~~Anklets~~ <sup>Pigmy Guillemots</sup> Anklets, ~~Trufts~~ Tufted Puffins, and G.W. Gulls. Ancient Murrelets & Cassin's Anklets seemed to be more scattered, as individual birds or in pairs. Off the Gordon Islands we saw 4 Killer Whales, 1 ♂, 2 ♀ & 1 imm. slowly heading SW around Bonles Pt. Back at Rose Harbour we had a late lunch 17:00, then Dave & I left for Bernaby.



# Field Notes

August 4, 1989

narrows. Beautiful evening. Some ~~sun~~ sun, some overcast. We took the same route back up. Stopped at the far Burnaby Cabin about 19:30. I got to work on the gulls. We decided to pitch a tent because of so many rats in the cabin. Saw a river otter on the way in. Deer, too. After dark Saw-whet Owls were calling from the woods.

August 5, 1989

While finishing up the gulls I had a great time listening to the odd metallic noises of the ravens. Ruby-crowned Kinglets, Red-breasted Nuthatches, Hermit Thrush, & Chestnut-backed Chickadees in the woods. Even heard the scream of a Peregrine a couple times, coming from high up on the tree line of Burnaby I. as a Bald Eagle. We watched a racoon foraging in the intertidal for quite some time. We got all packed, and launched the boat by 13:30. Our route home (back to Sandspit) took us through Juan Perez Sound → Darwin Sound → Richardson Passage → <sup>Tarwin Passage → Logan Inlet</sup> ~~Richardson Inlet~~, <sup>Helmet I</sup> ~~Flower Is.~~, → across Lushick Bay thru Limestone Is. (where Racoon researchers are) along outer Louise I coast → between Skedans Is. & Louise I., across Cumshewa Inlet, around Cumshewa Head and then straight up to Sandspit. Roughest waves on the way to Sandspit. We took one wave over the bow, which drenched me & the equipment. We got in to Sandspit around 20:30. Beautiful broken



August 5, 1989

clouds and sunlight up the Skidegate Inlet. We got everything squared away by midnight. Then the RCMP called Dave to request his help in aiding a boat that was taking on water about 5 mi. out of Copper Bay.

Dave rushed down to Copper Bay, launched his boat. Apparently a 50 ft motor boat, ca. 1950, was taking on water through a sprung cooling hose. Six people were on board, bailing like mad. Dave placed one rescuer on the boat, then waited. Rick came out from Queen Charlotte City (he's Coast Guard Auxiliary), and took the boat under tow ca. 04:00. Dave was up all night.

August 6, 1989

Spent most of day cleaning up my gull wings. Bit of rain & sun. After dinner Dave took me to Sandspit Airport. Bought 4 white buckets of dead gulls & the liquid N<sub>2</sub> Tank to Canadian Air Freight. It was 20:00. They said they couldn't get the tank on this flight, but I pleaded with them to do so. So they hurried, and took it. The fellow driving the pallet lift whipped around the corner, nearly spilling the tank. Anyway, I went to passenger check-in & said goodby to Dave Patterill. While waiting to board the plane I saw them load the buckets & tank in the front cargo bay, then close everything up. What a relief! About 3 min later, the firetruck came roaring up to the plane, the pilot came



August 6, 1989

running down the stairs, and as they opened the cargo bay vapor started coming out. I knew right away.

They unloaded a bunch of "smoking" stuff, and then my  $N_2$  tank. It was put on the firetruck. I went to security, then back to the counter. Pandemonium! I tried to convince them the tank was alright, & that they had just dumped it on its side. I asked what they were going to do with the tank, saying that it had valuable frozen specimens inside. The Canadian Air Mgr., MR. Ken Ward, called, and he assured me they ~~would~~ would try to take care of things. The pilot refused to allow the tank back on, and they even closed the plane to boarding by that time. They had to ask if I could still board, & eventually they dropped the ramp & I ran out to the plane, waving to the pilot as I went. When the plane landed in Prince Rupert the pilot came back & apologized to me for having to refuse my tank. I appreciated his concern. At Vancouver, an <sup>Air</sup> Canad. Agent met me, and both pilots also talked with us. I then called Dave in Sundspit (24:00) and told him of the experience. He got pretty upset at the cargo "goons" and said he would go down to the airport and straighten things out in the morning. Phillips Tolekies met me at the airport, and I stayed with Phillips & Claudia at UBC.





# Field Notes

August 7, 1989

Monday, today is a BC holiday. Could not get ahold of any govt people (eg to get a wildlife export permit, etc.). So, I went to the university, picked up all my specimens from various freezers. Hot & sunny day. Went to the airport & got the tank & gull buckets at 14:30. Called Alaska to arrange my trip up there. Sam Patten said he finished his Cordova work, and that most birds were dropping to the salmon spawns already. Called John Piatt to check about Middleton Island. He said I should call Brian Fedary on the island, via FAA, to see if gulls are still there. I did, leaving a message for him to call me in Seattle tonight. I headed out of Vancouver. At the boarder I was held up a bit while customs tracked down a F&W service officer at the beauty salon at 17:00 to find out what to do about my birds. I ended up filing a declaration to import wildlife. Arrived in Seattle late 18:30. Called Chris Wood, and we got my specimens into the Burke Museum's freezers. Went over to Ken & Sara's around 2100.

August 8, 1989

~~Ken~~ I rented an empty lig. N<sub>2</sub> tank. Sent it off to Anchorage. Ken took me to the airport. Warm, hazy day. Flew out on Alaska Airlines at 15:10. Sat on right side of the plane. We flew W out of Seattle, then N over the Olympics, up

2

2

## Field Notes

August 8, 1989

Juan de Fuca straight, and N up the spine of Vancouver I. I sat on rt. side of plane, got good views of Protection, San Juan Is., Victoria, Campbell River, Mitlenatch I., etc. Out over Queen Charlotte Strait the clouds obscured views. Still, the mountains of coastal BC & AK were visible. We flew right over Masset & N. Graham I. of the Queen Charlottes, but I couldn't see Langara I. Quite cloudy coming into Anchorage. Met John Piatt at the airport, stayed with him, a strapping fellow, from Newfoundland. We went out to dinner, talked alot about the oil spill. It's been very bad. Spread 800 miles out the Prince William Sound, killing seabirds all the way to the SE shores of the Alaska Peninsula. Possibly 120,000 birds recovered so far.

August 9, 1989

Raining. Flew out of Anchorage to Kenai at 0700 hrs. Rain at Kenai. The FAA flight to Middleton currently postponed (@ 10:00) due to fog. No flight to Middleton at all today. At mid-day I walked out to the inlet on the edge of town. Great expanses of mud flat and marshes, but poor visibility due to rain. Lots of gulls near the fish plants - Glaucous-winged, Kittiwakes, Mew Gulls, Herring Gulls, and I believe I saw an imm. Glaucous Gull. Common Redpolls in the spruce forests in



town, also Song Sparrows. Spent night at THE PLACE motel ca. 7 mi out of town (only 40.<sup>00</sup>/night versus 70.<sup>00</sup> in town).

August 10, 1989

Flew in a piper 2 engine plane (like at 310) to Middleton Island in the Gulf of Alaska at noon. Beautiful flight over mountains and glaciers of the Kenai peninsula. Quite cloudy, but did get a good view of the forested islands and coast of SE shore of Kenai Peninsula. Pretty foggy rest of the way out to Middleton I. As we approached the island I was surprised to see it was quite flat & marshy. It's surrounded by extensive reefs, and a flat marsh, bog surrounds most of the island, the center of which is an uplifted flat table, gently sloping from NE → SW, with the steepest sandy cliffs on the SW side. We landed under a low fog ceiling. Saw gulls around, but not a whole lot of birds. Met Sara Lenoe and Brian Fadely from Fish & Wildlife Service. It turns out, Brian was madly collecting gulls for me, because they were scheduled to leave the island this afternoon. Brian shot 18 gulls for me this morning (DAB 628-645). We drove in 4TV's to the barracks at SW end of island, packed everything up, and went back to the airstrip to wait for our flight out. I shot 2 more gulls (DAB 646-647), then



## Field Notes

August 10, 1989

also waited. But no plane came - too foggy. Oh well, so much the better for me, at least. There was a fair-sized flock of white-winged Crossbills feeding on pinecones (ca. 25 birds). Grazing - there probably weren't more than 5 spruce trees on the whole island. The majority of the island is low grass, brush. Lots of false Lilly of the Valley orchids blooming everywhere (Merianthemum dilatatum) dwarf pinecones (Epilobium latifolium), Monkey Flower (Minulus guttatus), Spreading Woodfern (Dryopteris austriaca), Haretail, Marshy fivefingers (Potentilla palustris), Violets (Viola sp.), Siberian Aster (Aster sibiricus). Savannah Sparrows are very abundant, plus Song & Fox Sparrows. Barn & Bank Swallows zipping over the fields. Kittiwakes (Black-legged), Pelagic Cormorants nesting on the water tanks. Ad. Bald Eagle (Brian says a pair is nesting out here). Quite a few Glaucous-winged Gulls with fledged chicks around. Brian says 40,000 Kittiwake nests, ca. 2000 GWC nests. But most everybody has already left the islands already. Just very late nesters remain. ~~Spent~~ Watched about 100 Tufted Puffins zipping over the bank nests at dusk (22:30).

August 11, 1989

Spent most of day preparing gulls. After dinner I went to the N.E. tip of the island. Heavy

August

10	11	12	13	14	15	16	17	18	19	20
Th	F	Sa	Su	Mo	Tu.	W	Th	F	S	Su



August 11, 1989

fog, wind ca. 15 knots, drizzle. Saw fair numbers (groups of 2-15) Wandering Tattlers on the rocky beach, as well as Western & Least Sandpeppers, Black Oystercatchers (20), Black Turnstones (15), Whimbrell (isolated pairs in the marshy areas), Common Snipe, and 2 Curlew Sandpipers! on the rocky beach. The long, thin decurved bill was unmistakable. They were slightly larger than dunlin size, somewhat tannish, white base of bill, slight eye stripe and brownish caps. At the spot large flock of Pelagic Cormorants, Kittiwakes & GW Gulls. At one of the fresh water ponds on the marshy flats I saw about 15 GWG fledglings, and 2 small groups of Gadwall and Pintail Ducks.

August 12, 1989

Spent most of the morning ~~preparing~~ stripping the gulls. Whew! 20 birds took a marathon stripping session. Weather still foggy, so we couldn't get a flight out today. Towards evening I drove out to the SW end of the island, and walked down the cliffs to the shipwreck on the N shore. Heavy fog. The path down to the ship is well overgrown along the cliffs, and some areas the path is nearly a creek, with ferns & arrowroot plants. On the flat marsh area between the cliffs and beach I saw Lesser Yellow-legs in marsh rivulets. The ship, a steel-hulled

A.M.N.W.R.

Kathy Kuletz

Debbie Carr



August 12, 1989

wreck, run up on the reef at Middleton Island during WW II because it was overloaded with iron & was breaking up, was covered in cormorants - they outlined the entire ship. Quite eerie in the fog. Most of the cormorant nests had nearly fledged young. Pelagic Cormorants. There were still Black-legged Kittiwakes nesting on the ship (about 40 pair), but only the nests inside the ship, along various steel beams, had young. I counted 11 nearly fledged chicks.

Brian Fadely doesn't think these chicks will make it. The gulls will get them. I saw Glaucous-wings moving about the ship - as if hunting. It was strange to be inside the ship, with its gaping holes, <sup>grass</sup> overgrown decks with Tufted Puffin burrows, and everywhere wet, dripping water. At the stern I surprised an incoming Tufted Puffin who dropped his leak-load of fish and then crashed into some pipes. I scrambled after him but he escaped into a pipe. I left the ship, went over to a chair-sized piece of driftwood and sat down to watch the coming & going of seabirds. It was about 42 hours before dusk, but it was thick fog (visibility < 500 ft).

Many Pelagic Cormorants, GW Gulls, and Tufted Puffins coming & going. Kittiwakes as well. Surprised to see & hear small numbers of Common Murres moving to and from the cliffs, as well as Rhino Auklets just barely skimming the Marsh tops as they headed out to sea. It seemed as if Puffin



August 12, 1984

and Murres were coming, Rhino Aukslets were going. Wandering Tattlers were common on the beach.

August 13, 1984

The word is a Twin-engine Grumman Goose (seaplane) will come in and pick us up today.

First time the clouds have lifted off the island in 4 days. I drove down to the NE end to see about collecting a couple of CWB's. Passed Lapland Longspurs in large flocks on the runway.

at NE Marsh, I shot one gull that looked ♀, but it was ♂. Gave up, even left him there in the brush, not wanting to mess with anymore specimens before the flight out. Decided to try for a Common Snipe. Had only 6 shells with me. ~~Fire~~ Fired 5 shots at snipe I scared up, but didn't hit a one.

While snipe hunting a Sandhill Crane came in out the sky, calling a staccato cry, circled, and moved S along the island. I hurried back to the FAA compound and got my gear together. Brian, Sara and I got everything squared away and went to the runway. About 13:00 we heard the drone of the plane, and the Goose came down from about 6000 ft thru a hole in the high clouds to the SE of Middleton.

In no time he was on the runway. A beautiful old plane - built ca. 1943. Tom Blue, a ~~very~~ ~~very~~ straight-talking fellow, old pilot, greeted us. We proceeded to load way over 600 lbs of gear onto the plane.



August 13, 1989

At first, Tom Blue thought it might not all go. But the duffle bags, etc. went into the nose compartment. The cardboard & wooden boxes went into the aft compartment, and along the wall of the passenger area. Finally, 3 large propane tanks & 2 outboard motors went on. In all, the plane was pretty full. Mr. Blue asked us if we wanted to "kiss the ground" before we departed. Brian Fadel went to sit in the copilot's seat, Sara Lense sat in the one erect passenger seat on the left side of the craft, and I sat just in front of her on a shelf seat, just behind the cockpit's headboard. My back faced the pilot. We shuddered down the runway at about 15:00. Long slow ascent, through the low clouds, then above them. When we were about 20 miles out to the N of Middleton Island, and at 6,600 ft altitude, I heard a loud "pop". The plane started shuddering, and the pilot through it into a 180° turn. At the same time, we were losing altitude, about 500-600 feet just in the turn. I saw the pilot working like mad to restart the now feathered left engine. To no avail. Sara, who had head phones on & could listen to the transmissions, looked very scared. Her eyes "popped," and tears began to well up. I leaned forward and held her knees. The pilot told us to don our life jackets. He had made a very good, instantaneous decision as soon as the motor went to head back to Middleton Island. He radioed in an emergency. What struck me during the flight was





August 13, 1989

his careful composure. Even before the engine went, I noticed he constantly checked his levers and throttles. He never just "sat back", but was constantly alert. Before take off I noticed a sign "This plane flies on one engine at altitudes less than 6000' absolute maximum." Well, we were flying, but he couldn't maintain altitude. Too great a load. We kept ~~descended~~ descending, right on thru the clouds. Sara said we had no engines, but that wasn't so, fortunately. Nevertheless, as we came out below the clouds, Middleton was ca 5 miles away, and we had only 400' altitude. The pilot was asking Brian exactly where the runway was, including the short one. But he couldn't maintain altitude, and since the runways were up on high bluffs, he elected to drop the goose in the water. He had no choice, really. He again conferred with Brian about what spot would be best. We had no altitude left, so we essentially went down off the NE point, down the island about 1/4 mile from that point itself. The pilot had to leave the gear up, for fear of us getting stuck on a reef. We landed very well, very smooth. The ocean was calm, almost no wind or swell! We began tapping to the beach. About 300 yards off we bumped over one reef, but then we made it all the way in to a rocky beach, with the help of Brian "paddling like mad" on the left side of



Q



34



August 13, 1989

plane, the side with the feathered motor. As it was, it was hard enough to to steer the plane straight in. We bumped on the rocks, and then were on a rocky slope. We first piled out the passenger side, took ropes out to the 2 FAA guys waiting on shore. Sara went with one fellow back to the compound. The pilot and I began the task of unloading the plane through the nose port. Quite difficult, getting boxes + equipment out. We safely got everything off except for one outboard + the 3 propane tanks. Then we had to truck everything back up the beach to the landing strip. There were rumors that OAS (Office of Aviation Services) was sending out a plane this evening to pick us up. It took a while to get the gear up from the beach. We got everything squared away by 17:00. At 18:00 an Beechcraft twin showed up - from OAS. The new pilot brought 2 winches and plenty of rope. We spent the next several hours winching the plane up with the incoming tide (We had landed at low tide). It was nearly dark when the plane was secured. It had been winched over 30 ft. We then all fit in the Beechcraft (New pilot, Tom Blue, Brian, Sara + I), and took off about 22:45. Beautiful flight back, way over the clouds - clear sky -  $\frac{3}{4}$  moon + light horizon behind dark, jagged mountain peaks. Arrived in Anchorage in ca. 1 hr - with all my gear + gulls. Slept at Scott ~~Hatch~~ Hatch's house.



August 14, 1989

Rented a car from Practical Car Rental (Cambell St.), Anchorage (29.50/day + 50 mi./day fee). No cars were available at the airport. Left Anchorage about 15:00, after getting my big  $N_2$  Tank filled, and having lunch with Brian Fodely. Drove first to Putage Glacier. Along the way I saw a Beluga Whale (at Beluga Point !?). Quite a surprise - such a white beast, showing emerging & its back out of the water, proceeding in a long arch exposing most of its back, before disappearing in a sharp "leap" without once exposing its tail. The Beluga did this slow arching surfacing probably 6 times, all within the same general area, then it died.

Beluga Point is at the beginning of Turnagain Arm, the inlet which proceeds nearly up to Putage Glacier. Highway 1 proceeds down and up either side of this arm. Saw Dall Sheep on the rocks just above Beluga Point. Loads of tourists stopping to see the scrappy creatures.

After Putage Glacier, ~~the~~ and Turnagain Arm, the road goes up and thru some wide mountain passes. The ~~area~~ country looks almost tundra-like, with snow and meadows abounding. The highway skirts the edge of a large lake ( ), then begins descending into large expansive spruce & bog flats. It parallels the course of both ~~the~~ Kenai and Anchor Rivers. The spruce trees are surprisingly ~~short~~ short & thin - many ca 15' tall, spaced. The area looks "stunted". Also, in the mountains, over 1/2 the spruce have brown



## Field Notes

August 14, 1989

needles, and appear dead. Anyway, saw beavers & occasional gulls along the river. All gulls appeared to be good GW Gulls. Arrived at Homer around 20:00. Went straight to Lunds End at the end of the spit. Saw fair numbers of Kittiwakes & GW Gulls feeding at the fish docks. Off to the S of the spit - an island was visible with a "million" white dots flying about it. That's the place I need to go! Went back to Homer, but Motels all booked, and too expensive (48-70.00). Drove N on HIWAY 1 to Anchor Point (18 mi), stayed at the lodge there (30.00). Black-billed Magpies!

August 15, 1989

Got the brilliant idea to stop in at the Alaska Maritime Natl. Wildlife Refuge Hdqts. in Homer. Met Kathy Kuletz (USFWS out of Anchorage) & Debbie Carr (volunteer), who agreed to take me out, weather permitting, on a survey run for murrelets tomorrow. They've been involved in a murrelet study on Kachemak Bay all summer, funded by Exxon because of the spill. In the afternoon I went down to the docks to meet Dave Nysewander (Refuge Mgr), who was coming in on a 25' whaler (Pioneer model) from the Barren Islands. Nice fellow, very interested in my work. He said they couldn't stay out on the Barrens because of small craft warnings. The whaler, called the "Sandlance", has twin 140 HP Johnson's. Damn - big motors! Spent the evening





## Field Notes

and night at the Fish & Wildlife's bunkhouse in Homer.

August 16, 1989

Beautiful morning & sunrise. Some clouds, but also clear & calm. Went with Debbie to another 25' Whaler (Twin 120 HP Johnsons), met Kathy at 06:30 at the dock. We went out & ran transects along a couple narrows SW of Homer, counting Marbled Murrelets & Kittlitz's Murrelets. Saw none of the latter, but many of the former. Most were still very mottled, but some were getting into winter plumage. Juveniles confused matters, too. It turns out, the island S of Homer spit has about 5000 Black-legged Kittiwake nests on it, it is called Bull Island. We did not go near it today, rather, after the transects ~~was~~ we headed back to to 40 Foot rock, passing along some tree island ~~for~~ forming the SW entrance to Kachemak Bay.

Amazing birdlife - 2 Parositic ~~jaegers~~, jaegers, several dark, swallow-like Fork-tailed Storm Petrels (in broad daylight), and large rafts of Short-tailed & Sooty Shearwaters, as well as Tufted Puffins, Common Murres, Rhinoceros Auklets, Black-legged Kittiwakes & Marbled Murrelets. When we got to 60 Ft. Rock, we circled it twice. Saw about 20 nearly-fledged GW Gull chicks, and several more such chicks already on the water. Also nesting Tufted Puffins, Common Murres, and a majority of Kittiwakes.



# Field Notes

August 16, 1989

8/14 I collected a total of 8 GWC's (DAB 648-655) from 60 Ft. Rock, using 14 shells, but needing to shoot several gulls twice. Surprisingly plenty of GWC's appeared after I began collecting, at least 50 birds around. Weather thickened with clouds, but still calm. On our way back to Homer I saw a single Horned Puffin! Black Oystercatchers on 60 Foot Rock, as well as Pelagic Cormorants (ca. 50 cormorants, 2 chicks still on ledges).

After arriving back at Homer, I drove N out of town. Prepared the gulls at a turnout along the Anchor River. It rained the rest of the day. Many gulls passed along the river, all GWCull type.

August 17, 1989

Went out with Kathy & Debbie on a survey again. This time we proceeded up Kachemak Bay. Good morning, warmer, no rain at first. Saw many Marbled Murrelets, and, as we neared the large glacier on the S shore, we started seeing several Kittlitz's Murrelets - beautiful - very soft, lt. mottled brown, uniform. Lightish bellies, darkish eye spot. Large flocks (50-100) of mixed tern - Cal. Arctic & Aleutian Terns, as well as many Kittiwakes. Also saw Pigeon Guillemots, Surf Scoters, and, as we neared Bull Rock, large flocks of Sooty & Short-tailed Shearwaters, Common Murres, Tufted



August 17, 1989

Puffins, & Black-legged Kittiwakes. We circled Gull Rock - which has an unbelievable concentration of the Kittiwakes, but also many GWC nest. In fact, there were at least ca. 200 GWC gull chicks on & around the island. All GWC Gulls looked good - all light, w/ light Primary Tips. On the way back to Homer we saw ~~one~~ one Pomarine Jaeger, and several Fork-tailed Storm Petrels, as well as more of everything else. Several Bonaparte's Gulls were at the dock area. In all, we were out from 06:30 - 10:30. Driving back into town, along the spit I saw what I think were Herring Gulls, and some ~~Goldeneyes~~ Pintail + Goldeneyes on Beluga Lake.

Drove from Homer back to Anchorage this afternoon, evening. Stopped at one river, looked along it for awhile, saw only Fox Sparrows. Back in Anchorage ~~before~~ I went straight to the airport, to request a Ticket change. I described my situation to Alaska Airlines as deperate. They were kind enough to put me on a flight tomorrow at ~~17:30~~ 17:30. (Otherwise, I'd have to wait until Aug. 23rd!). Spent the night at John Piatti's house, along with Brian Fadely.

August 18, 1989

Spent most of the day getting my specimens packed, and shipped out on Alaska Airlines.

It was easy to ship my big N<sub>2</sub> tank - nothing



August 18, 1989

compared to Canada. 2 frozen loaves + the tank cost \$68.00. Not bad. ~~Flared~~ Said goodbye to John Piatt, Scott Hatch + Brian Fadel.

Flew out of Anchorage at 17:30. The flight was nearly all clouds - couldn't see much, and it got dark pretty quick. Arrived in Seattle 22:40, Ken picked me up at the airport.

August 19, 1989

In Seattle, WA; at Ken + Sara's House. Some fledgling crows still about, and plenty of Starlings. High clouds.

August 20, 1989

Helped Ken fix his Chrysler 6 HP outboard, then drove up to Anacortes, took ferry to Friday Hbr. to pick up my gulls. Light rain, also smoggy (pulp mills) in the San Juans. Kind of sad to be back at Friday Hbr for the last time. Met Flow at dinner at the Sal - mio. Oh ya, say 2 Bald Eagles on the side over, as well as a nest on SW corner of Shaw Island.

lots of gulls at Friday Hbr - many Bonaparte's

GLB fledglings, several Heermanns. Many Cassin Waxwings in town. Caught the 20:30 ferry back to Anacortes. Dark + drizzle.





D. A. Bell

1990

Catalogue #679-727

List of Localities



Douglas A. Bell  
1990

Catalog

Mouth of Salinas River, Salinas Wildlife Area,

Monterey Co., California

5 January

Bodega Bay Marine Lab Reserve, Bodega Bay, Sonoma Co.,  
California

29 January

Tatoosh Island, Clallam Co., Washington

25-27 May

Langara Light Station, Langara Island, Queen Charlotte  
Islands, British Columbia, Canada

13 June

Cox Island, Cloak Bay, Langara Island, Queen  
Charlotte Islands, British Columbia, Canada

14 June

Buldir Island, Rat Islands, Aleutian Islands,  
Alaska

27 June



Mouth of Salinas River, Salinas Wildlife Area,  
Monterey Co., California

January 5, 1990

679

Complete Skeleton

Larus canus 1st Winter, ♀ ovary quiescent; Wt. 315 G  
 Stomach empty, except for sand. Tape worms in stomach.  
 Small (~1-2 mm) bumps, almost papillae-like, yellowish,  
 all over intestine outer wall. 2 tissue nials LHKM.  
 Moderate fat. Legs ~~fat~~ flesh colored. Base of bill flesh  
 colored, tip black.

680

Complete Skeleton

Larus argentatus ad. ♀; ovary quiescent; Wt 1,025 G  
 Legs pink-10RP 6/4; Bill- straw yellow 5Y 8/3; Iris- straw  
 yellow - 2.5Y 8/2 light flecking at base of iris; spot 5YR 6/10 -  
 light orange. Stomach contained chicken femur. Heavy fat.  
 LHKM - 2 tissue nials.

681

Complete Skeleton

Larus californicus ad. ♂; testes 1.5 mm ⌀. Wt. 605 G  
 Bill - yellow-green 7.5Y 7/2; legs: yellow-green 7.5Y 7/2;  
 Gape - orange, bill spot - orange (5YR 7/2). Tip of bill black  
 Eyering - black + deep maroon, Iris - flecked dk. brown.  
 2 tissue nials - LHKM. Stomach empty except for plastic  
 and paper. Good fat.



Mouth of Salinas River, Salinas Wildlife Area, Monterey Co., Calif.

January 5, 1990

complete  
skeleton

682

Larus californicus ad ♂; testes ~ 2 mm; dk. brown WT. 620 G

Bill straw yellow  $5Y\ 8/4$ ; Spot - flame scarlet, color 15; tip of bill black; Eyering & gape - red-orange:  $5YR\ 4/4$ ; Iris dk. brown. Legs - yellow green  $7.5Y\ 6/2$ . Heavy fat. Stomach empty except for gravel. 2 tissue vials LHKM

complete  
skeleton

683

Larus californicus ad ♂; testes 2 mm; dk. brown. WT 760 G

Bill yellow green, legs yellow green -  $5Y\ 7/1$ . Bill spot faint orange; Gape - faint orange. Eyering black; Iris - dk. brown. Stomach full of garbage & chicken skin. Heavy fat. 2 Tissue vials LHKM.

complete  
skeleton

684

Larus occidentalis 4 yrs. old. ♀; Ovary quiescent. WT. 1,000 G

Bill  $5Y\ 8/6$  (straw yellow); Eyering - yellow  $2.5Y\ 7/10$ ; Iris  $10YR\ 7/2$ ; Pigment; lt, sandy throat  $10YR\ 5/2$ ; Gony spot -  $5YR\ 6/6$  Bill black tipped. Legs -  $5R\ 6/4$ . Heavy fat. 2 tissue vials Small crabs in stomach.

Discarded

685

Larus occidentalis 1st. yr.

WT. 1,050 G





2 miles W. of Moss Landing, Monterey Bay, Monterey Co.,  
California

January 19, 1990

Complete  
Skeleton 686

*Larus heermanni* ♂

Wt. 535 G

Dark iris, Orange-red eye-ring + bill; tip of bill black, legs  
black. Testis ~ 4 mm x 3 mm. Good Fat.

Complete  
Skeleton 687

*Larus heermanni* ♀

Wt 450 G

Iris dk. brown; Orange-red eye ring + bill; tip of bill  
+ legs black. Ovary quiescent. Heavy Fat

Complete  
Skeleton 688

*Larus heermanni* ♀

Wt. 455 G

Iris dk. brown flecked on grey background; orange red  
eyering + bill. Tip of bill black, legs black. Heavy  
fat. Ovary quiescent.



## Catalog

Douglas A. Bell

2 miles W. Moss Landing, Monterey Bay, Monterey Co.,  
Calif.

Complete  
Skeleton

January 19, 1990

689

Larus canus ♂

Wt. 440 G

Gape <sup>1</sup>/<sub>2</sub> orange; eye ring vermillous, iris graining, ~~bt~~ & dark  
grey. Bill & legs ~~str~~ green-yellow. Testis 3x2 mm.  
Good Fat.

Complete  
Skeleton

690

Larus argentatus 3rd year ♂ ~~testes small; minute~~ Wt. 1375 G

Iris straw yellow; Eyering dark; Bill ivory w/ black  
subterminal spot. Heavy Fat. Stomach full of garbage: 73 g

Complete  
Skeleton

691

Larus argentatus <sup>3-4 ♂</sup> ~~♂~~ ♂ testes minute Wt. 1300 G

Iris straw yellow. Eyering dark; bill flesh <sup>yellow</sup> colored.  
Heavy fat. Stomach 1/2-filled w/ garbage: 43 g ~~73~~

Complete  
Skeleton

692

Larus argentatus Ad ♀ Ovary quiescent Wt. 1,120 G

Iris lemon yellow. Eyering straw yellow. Bill ~~flr~~  
flesh-yellow. Heavy fat. Trace of orange gonial spot.  
Stomach full garbage: 42 g. ~~43~~



2 miles W. Moss Landing, Monterey Bay, Monterey Co., Calif.  
January 19, 1990

Complete  
Skeleton 693

*Larus <sup>argentatus?</sup> thayeri* ♀ Ovary grape-like WT. 1,080 G  
Eyering flesh-pink; Iris faded straw yellow Bill  
yellow green w/ orange goncal spot. Heavy fat.  
Stomach full of garbage. ~~142~~ 38 G stomach

Complete  
Skeleton 694

*Larus thayeri* Ad ♀ Ovary grape-like wt. 915 G  
Eyering pink + dark; Iris dk. brown; bill straw  
yellow, orange goncal spot. Heavy fat. Stomach  
empty: ~~28~~ 28 G

Complete  
Skeleton 695

*Larus thayeri* Ad ♂ Testes < 3 mm. WT 1,125 G  
Eyering pink. Iris tan w/ olive grain, bill straw  
yellow; orange goncal. Stomach empty: 28 G stomach  
Heavy fat

Complete  
Skeleton 696

*Larus calus*. 2nd year. ♀ Ovary grape-like. WT. 405 G  
Eyering black; Iris grey w/ dk. grains; legs & bill  
dull yellow green. Stomach  
Heavy fat. Stomach 1/4 full garbage



# Catalog

Douglas A. Bell

2 miles W. Moss Landing, Monterey Bay, Monterey Co., Calif.

19 January 1990

complete  
skeleton

697

*Larus canus* 1st yr. ♀ ovary quiescent- wt. 395 G

Dark tin, Eye ring; bill flesh; tip black, legs  
flesh. Heavy fat. Stomach empty.

complete  
skeleton

698

*Larus occidentalis* x *glaucescens* (hybrid)





Bodega Marine Lab Reserve, Bodega Bay, Sonoma Co., Calif.29 January 1990

Complete  
Skeleton 699 *Larus delawarensis* ♀ ovary grape-like. Wt. 455 gms  
Bill creme, legs creme, Bill w/ subterminal black band.  
Eyering chocolate-red; Iris dull straw yellow. Good fat.  
Stomach empty except for otoliths - 2~4 mm. (2 large, 4 small).

Complete  
Skeleton 700 *Larus delawarensis* ♀ ovary grape-like Wt. 465 gms  
Legs + bill yellow-green; Gape + eye-ring orange red, latter  
is darker; subterminal black band on bill. Iris straw  
yellow (dull) Stomach  $\frac{1}{4}$  full of bread + shell-bits - from  
starfish? Fat Good.

Complete  
Skeleton 701 *Larus delawarensis* ♂ L&R Testis ca. 5 x 2 mm. Wt. 515  
Legs + bill yellow-green, bill w/ subterminal dark band;  
Gape + eye-ring orange-red; iris bright straw yellow.  
Stomach contained bread, small rock + feather matter - bird  
smelled like garbage.



D.A. Bell

Catalog

*Larus glaucescens*

703

Location: Tatoosh Island, nr. Strawberry I.,  
Washington

Date: May 25, 1990

Spel +  
RW

Sex: ♀ 1 Ova > 0.8; 1 Ova > 0.6 cm; 6 ova > 0.47 cm; <sup>enlarged</sup>oviduct.

Wt: 910g

Fat: Good

Wing: R 41.3 cm

Span: 139 cm

Pr. L. 10 - 29.0 cm

7 - 27.8 cm

9 - 29.0 cm

6 - 25.3 cm

8 - 28.3 cm

5 - 22.9 cm

Tail L: 15.9 cm

Tarsus: L 5.77 Toes In. 4.09 Out. 5.23 Mid: 5.40

Head L: 11.83

Hal: 0.46

Bill L: 5.33

Post  
Nares: 3.31

Bill W: 1.23

Gape: 3.13

Bill D: Gonyx: 1.95

Ant  
Nares: 1.89

Post  
Nares: 1.78

Broad Patches: feathered.

Bill Color UM - 2.5 Y 7-10 LM - 2.5 Y 7-10 Spot - #14

Eyering: 5 RP 6-6

Feet 10 YR 8-3

Primit: 10 YR 2-2 Fine gray lower 1/2

Legs: 5 RP 7-4

Remarks: Pair 22 Mate 704

Stomach w/ medium sized fish. P<sup>o</sup> - 10-1.



*Larus glaucescens* x *occidentalis*

704

Location: Tatoosh Island, nr. Strawberry I.,  
WashingtonSkel +  
RW

Date: May 25 1990

Sex: ♂ LT: 1.96 x 1.44 x 1.28 RT: 1.56 x 1.22 x 1.15 cm

Wt: 1150g

Fat: Heavy

Wing length: L 41.5 cm

Span: 141.0 cm

Pr. L.: 10- 28.7 cm

7- 28.0 cm

9- 29.7 cm

6- 26.4 cm

8- 29.3 cm

5- 24.6 cm

Tail L.: 16.8 cm

Tarsus: R 5.95 Toes in: 4.21 out: 5.43 Mid: 5.52

Head L: 12.83

Hail: 0.67

Bill L: 5.91

Post  
Nares: 3.61

Bill W: 1.72

Gape: 3.33

Bill D: Goupy: 2.22

ant  
Nares: 2.15Post  
Nares: 2.09

Brood patches: uppers downy, lower downy

Bill color UM: 2.5Y 7-12 LM: 2.5Y 7-12 spot: 14

Eyering: 5 RP 6-6 + 10 YR 7-4

Irides: 5 Y 8-3

Pigment: 10 YR 3-2 fine grainy 3/4

Legs: 5 RP 6-6

Remarks: Mate 703 (Pair 22). Fish (large) in  
stomach. Pin Worms (Nematodes) in stomach.

P° 10-1

7. 1990. 1991. 1992. 1993. 1994. 1995. 1996. 1997. 1998. 1999. 2000. 2001. 2002. 2003. 2004. 2005. 2006. 2007. 2008. 2009. 2010. 2011. 2012. 2013. 2014. 2015. 2016. 2017. 2018. 2019. 2020. 2021. 2022. 2023. 2024. 2025. 2026. 2027. 2028. 2029. 2030. 2031. 2032. 2033. 2034. 2035. 2036. 2037. 2038. 2039. 2040. 2041. 2042. 2043. 2044. 2045. 2046. 2047. 2048. 2049. 2050. 2051. 2052. 2053. 2054. 2055. 2056. 2057. 2058. 2059. 2060. 2061. 2062. 2063. 2064. 2065. 2066. 2067. 2068. 2069. 2070. 2071. 2072. 2073. 2074. 2075. 2076. 2077. 2078. 2079. 2080. 2081. 2082. 2083. 2084. 2085. 2086. 2087. 2088. 2089. 2090. 2091. 2092. 2093. 2094. 2095. 2096. 2097. 2098. 2099. 2100. 2101. 2102. 2103. 2104. 2105. 2106. 2107. 2108. 2109. 2110. 2111. 2112. 2113. 2114. 2115. 2116. 2117. 2118. 2119. 2120. 2121. 2122. 2123. 2124. 2125. 2126. 2127. 2128. 2129. 2130. 2131. 2132. 2133. 2134. 2135. 2136. 2137. 2138. 2139. 2140. 2141. 2142. 2143. 2144. 2145. 2146. 2147. 2148. 2149. 2150. 2151. 2152. 2153. 2154. 2155. 2156. 2157. 2158. 2159. 2160. 2161. 2162. 2163. 2164. 2165. 2166. 2167. 2168. 2169. 2170. 2171. 2172. 2173. 2174. 2175. 2176. 2177. 2178. 2179. 2180. 2181. 2182. 2183. 2184. 2185. 2186. 2187. 2188. 2189. 2190. 2191. 2192. 2193. 2194. 2195. 2196. 2197. 2198. 2199. 2200. 2201. 2202. 2203. 2204. 2205. 2206. 2207. 2208. 2209. 2210. 2211. 2212. 2213. 2214. 2215. 2216. 2217. 2218. 2219. 2220. 2221. 2222. 2223. 2224. 2225. 2226. 2227. 2228. 2229. 2230. 2231. 2232. 2233. 2234. 2235. 2236. 2237. 2238. 2239. 2240. 2241. 2242. 2243. 2244. 2245. 2246. 2247. 2248. 2249. 2250. 2251. 2252. 2253. 2254. 2255. 2256. 2257. 2258. 2259. 2260. 2261. 2262. 2263. 2264. 2265. 2266. 2267. 2268. 2269. 2270. 2271. 2272. 2273. 2274. 2275. 2276. 2277. 2278. 2279. 2280. 2281. 2282. 2283. 2284. 2285. 2286. 2287. 2288. 2289. 2290. 2291. 2292. 2293. 2294. 2295. 2296. 2297. 2298. 2299. 2300. 2301. 2302. 2303. 2304. 2305. 2306. 2307. 2308. 2309. 2310. 2311. 2312. 2313. 2314. 2315. 2316. 2317. 2318. 2319. 2320. 2321. 2322. 2323. 2324. 2325. 2326. 2327. 2328. 2329. 2330. 2331. 2332. 2333. 2334. 2335. 2336. 2337. 2338. 2339. 2340. 2341. 2342. 2343. 2344. 2345. 2346. 2347. 2348. 2349. 2350. 2351. 2352. 2353. 2354. 2355. 2356. 2357. 2358. 2359. 2360. 2361. 2362. 2363. 2364. 2365. 2366. 2367. 2368. 2369. 2370. 2371. 2372. 2373. 2374. 2375. 2376. 2377. 2378. 2379. 2380. 2381. 2382. 2383. 2384. 2385. 2386. 2387. 2388. 2389. 2390. 2391. 2392. 2393. 2394. 2395. 2396. 2397. 2398. 2399. 2400. 2401. 2402. 2403. 2404. 2405. 2406. 2407. 2408. 2409. 2410. 2411. 2412. 2413. 2414. 2415. 2416. 2417. 2418. 2419. 2420. 2421. 2422. 2423. 2424. 2425. 2426. 2427. 2428. 2429. 2430. 2431. 2432. 2433. 2434. 2435. 2436. 2437. 2438. 2439. 2440. 2441. 2442. 2443. 2444. 2445. 2446. 2447. 2448. 2449. 2450. 2451. 2452. 2453. 2454. 2455. 2456. 2457. 2458. 2459. 2460. 2461. 2462. 2463. 2464. 2465. 2466. 2467. 2468. 2469. 2470. 2471. 2472. 2473. 2474. 2475. 2476. 2477. 2478. 2479. 2480. 2481. 2482. 2483. 2484. 2485. 2486. 2487. 2488. 2489. 2490. 2491. 2492. 2493. 2494. 2495. 2496. 2497. 2498. 2499. 2500. 2501. 2502. 2503. 2504. 2505. 2506. 2507. 2508. 2509. 2510. 2511. 2512. 2513. 2514. 2515. 2516. 2517. 2518. 2519. 2520. 2521. 2522. 2523. 2524. 2525. 2526. 2527. 2528. 2529. 2530. 2531. 2532. 2533. 2534. 2535. 2536. 2537. 2538. 2539. 2540. 2541. 2542. 2543. 2544. 2545. 2546. 2547. 2548. 2549. 2550. 2551. 2552. 2553. 2554. 2555. 2556. 2557. 2558. 2559. 2560. 2561. 2562. 2563. 2564. 2565. 2566. 2567. 2568. 2569. 2570. 2571. 2572. 2573. 2574. 2575. 2576. 2577. 2578. 2579. 2580. 2581. 2582. 2583. 2584. 2585. 2586. 2587. 2588. 2589. 2590. 2591. 2592. 2593. 2594. 2595. 2596. 2597. 2598. 2599. 2600. 2601. 2602. 2603. 2604. 2605. 2606. 2607. 2608. 2609. 2610. 2611. 2612. 2613. 2614. 2615. 2616. 2617. 2618. 2619. 2620. 2621. 2622. 2623. 2624. 2625. 2626. 2627. 2628. 2629. 2630. 2631. 2632. 2633. 2634. 2635. 2636. 2637. 2638. 2639. 2640. 2641. 2642. 2643. 2644. 2645. 2646. 2647. 2648. 2649. 2650. 2651. 2652. 2653. 2654. 2655. 2656. 2657. 2658. 2659. 2660. 2661. 2662. 2663. 2664. 2665. 2666. 2667. 2668. 2669. 2670. 2671.

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D. A. Bell

Catalog

*Larus glaucescens* x *occidentalis*

705

Location: Tatoosh Island, nr. Strawberry I.,

Date: May 25 1990

Washington

Sex: ♂ LT: 1.47 x 1.14 x 1.07 RT: 1.31 x 0.90 x 0.85

Wt: 1115 g

Fat: Good.

Wing L: R: 42.7 cm

Span: 148.0 cm

Pr. L: 10- 29.3 cm

7- 28.4 cm

9- 29.7 cm

6- 27.0 cm

8- 29.5 cm

5- 25.0 cm

Tail L. = 17.3 cm

Tarsus = R. 6.52 Toes in: 4.54 out: 5.66 Mid: 5.70

Head L = 13.11 cm

Head: 0.50

Bill L = 5.85 cm

Post Nares: 3.86 cm

Bill W = 1.42 cm

Gape: 3.68 cm

Bill D: Goups: 2.18 cm

ant Nares: 2.14 Post Nares: 2.00

Brood patches: de feathering

Bill color: UM 2.5Y 7-10  
subterminal black spots

LM: 2.5Y 7-12 Spot: 14

Eyering: 10YR 8-2

Irides: 10YR 8-2

Tipment: 10YR 2-2 fine graining full

Legs: 10RD 6-4

Remarks: Mate 706 Stomach empty. P<sup>o</sup> 10-1.

Pair 21





D. A. Bell

## Catalog

*Larus glaucescens* x *occidentalis*

706

Location: Tatoosh Island, nr Strawberry I,

Skel +  
LW

Date: May 25 1990

Washington

Sex: ♀ 6 ova &gt; 0.50 cm.

Wt: 850g

Fat: Good

Wing L: R 41.9 cm

Span: 139.5 cm

Pr. L 10- 29.3 cm

7- 27.4 cm

9- 29.6 cm

6- 26.0 cm

8- 28.9 cm

5- 24.1 cm

Tail L: 15.2 cm

Tarsus: R. 5.64 Toes ln: 4.31

Out.: 5.20

Mid: 5.54

Head L: 11.69 cm

Hail: 0.59

Bill L: 5.22 cm

Post  
Nares: 3.34 cm

Bill W: 1.27 cm

Gape: 3.04 cm

Bill D: Gouys: 1.99 cm

Ant  
Nares: 1.91Post  
Nares: 1.80

Brood patches: small

upper downy  
lower quarter-size skin

Bill color UM: 5Y7-10

LM: 5Y7-10 lpost: 15

Eyering: 5 RP 6-4

Irides: 10R 8-2

Pigment: 10YR 2-2

Fine graining lower 3/4

Legs: 5 RP 6-4

Remarks: mate 705 Stomach empty.

P' 10-1.

Pair 21



D.A. Bell

Catalog

*Larus glaucescens*

707

Location: Tatoosh Island, nr. Strawberry I.,  
Washington

Date: May 26 1990

Sex: ♂ IT: 1.79 x 1.08 x 0.95 RT 1.21 x 0.87 x 0.87

Wt: 1200g Fat: Good.

Wing L: L 41.3 cm Span: 140.5 cm

Pr. L 10 - 28 cm 7 - 27.0 cm

9 - 28.7 cm 6 - 25.0 cm

8 - 28.2 cm 5 - 23.5 cm

Tail L: 16.3 cm

Tarsus: L 6.42 Toes in: 4.47 Out: 5.78 Mid: 6.03

Head L: 13.17 Hal: 0.48

Bill L: 6.23 Post Nares: 3.95

Bill W: 1.30 Gape: 3.35

Bill D Gouys: 2.23 ant Nares: 2.18 Post Nares: 1.98

Broad patches: 3

Bill color UM: 2.5 Y 7-10 LM: 2.5 Y 7-10 Spot: 14

Eyering: 5 RP 6-4

Irides: 5 Y 8-4

Pigment: 10 YR 3<sup>+</sup> fine graining lower ~~1/2~~ 1/2

Legs: 10 RP 6-4

Remarks: Mate of 708 (Pair 21 - Tent L #2).

Stomach empty - threw up fish when shot. 1° 10-2.

2019-2020

*Larus glaucescens x occidentalis*

708

Location: Tatoosh Island, nr. Strawberry I.;

Washington

Date: May 26 1990

Sex: ♀ See below; + 4 ova &gt; 0.50 cm Ø.

Wt: 1165 g

Fat: Heavy

Wing L: L 41.0 cm

Span: 139.0 cm

Pr. L: 10- 29.4 cm

7- 27.6 cm

9- 30.0 cm

6- 26.1 cm

8- 29.6 cm

5- 24.5 cm

Tail L: 16.5 cm

Tarsus: L 5.85 Toes in: <sup>3.93</sup>~~3.93~~ Out: 5.22 Mid: 5.22

Head L: 11.98 cm

Hae: 0.48

Bill L: 5.16 cm

post  
Nares: 3.33

Bill W: 1.32 cm

Gape: 3.17

Bill D: Goups: 1.98

ant  
Nares: 1.91post  
Nares: 1.69

Broodpatches: 3

Bill color UM: 10 YR 7-10 LM: 10 YR 7-12 Spot: 14

Eyering: 5 RP 5-6 + 10 YR 7-4

Irides: \$ 5 Y 8-4

Pigment: 10 YR 2-1 dark, blotchy lower 1/4

Legs: 10 RP 5-4

Remarks:

On 1 egg nest - ( ); & unshelled egg  
in oviduct; + 1 yolk 2.12 cm Ø. Fish meal in  
stomach. P<sup>o</sup> 10-2. Tape worms in body.



GW/h

D.A. Bell

Catalog

*Larus glaucescens* x *occidentalis*

709

Location: Tatoosh I., nr. Beach

Washington

Date: 27 May 1990

Sex: ♀ 2 large ova; > 1.5 cm b

Wt: 1,075 g

Fat: Good

Wing length 40.6 (L) Span: 138 cm

Pr. L. 10- 28.1 w 7- 27.6

9- 29.3 " 6- 26

8- 29.0 " 5- 24.5

Tail L: 16.4

Tarsus: 5.92 (L) Toes In: 4.34

Out: 5.43

Mid: 5.63

Heard L 12.17

Hal: 0.46

Bill L 5.55

Post Nares: 3.40

Bill W 1.20

Gape: 2.75

Bill D: Gouys: 2.05

ant Nares: 1.98 Post Nares: 1.80

Brood patches: 3

Bill color UM: 5Y 7/10 LM: 5Y 7/10 Spot: 14

Eyering: 5RP 5/6 + 10YR 8/2 PF-L

Irides: 5Y 8/2 G

Pigment: 10YR 7/2 DG 1/2

Legs: 10RP 5/4

Remarks shot off territory Mate of 710

Stomach empty. P<sup>o</sup> 10-2

4



H

D.A. Bell

Catalog

*Larus glaucescens* x *occidentalis*

710

Location: Tatoosh I., nr. Beach

Date: 27 May 1990

Washington

Sex: ♂ Testes large, N.E.

Wt: 1,240 g

Fat: Moderate

Wing L: 44.9 (R) Span: 151.0 cm

Pr. L: 10 - 31

7 - 30.1

9 - 31.7

6 - 28.4

8 - 31.2

5 - 26.5

Tail L: 18.0

Tarsus: 6.55 (R) Toe L: 4.31 Out: 5.68 Mid: 5.91

Head L: 13.48

Hail: 0.60

Bill L: 6.17

post  
Naris: 3.93

Bill W: 1.39

Gape: 3.51

Bill D: Goups: 2.27

ant  
Naris: 2.12 post  
Naris: 1.99

Brood patches 3

Bill color: UM: 2.5Y 7/10 LM: 2.5Y 7/10 Spot: 14

Eyering: 5 RP 5/4 PD

Irides: 5Y 8/2 G

Pigment: 10 YR 3/3 MBF

Legs: 10 RP 6/4

Remarks: Shot off territory Mate of 709

Tape worms in intestines Fish in stomach. PO 10-1



W6/h

D.A. Bell

Catalog

*Larus occidentalis* x *glaurescens*

711

Location: Tatoosh I., nr Toad Point

Date: 27 May 1990

Washington

Sex: ♀ Egg (1 cm) in oviduct; 2 other ova > 0.70 cm.

Wt: 1,130 G

Fat: Heavy

Wing Length: 40.2 (L) Span: 137.0 mm

Pr. L: 10 - 28.2 W 7 - 26.7 W

9 - 28.6 " 6 - 26 "

8 - 28 " 5 - 23.7 "

Tail L: 15.8 cm

Tarsus: 6.01 (R) Tarsus L: 4.53 Out: 5.66 Mid: 5.91

Head L: 12.33 Hal: 0.56

Bill L: 5.74

Post Nares: 3.61

Bill W: 1.23

Gape: 2.90

Bill D: Goups: 1.98

Ant Nares: 1.89 Post Nares: 1.73

Brood patches: 3 - quarter sized.

Bill color UM: 2.5 Y 7/12 LM: 2.5 Y 7/12 Spot: 14

Eyes: 5 RP 7/4 + 10 YR 7/10 (Lower) PY-M

Irides: 5 Y 8/3 G

Pigment: 10 YR 2/1 OB 1/2

Legs: 10 RP 5/4

Remarks: Shot on territory Fish in stomach.

10-1

@

H

*Larus glaucescens x occidentalis*

712

Location: Tatoosh I., nr. Toad Point

Date: 27 May 1990

Washington

Sex: ♂ Testes enlarged, NE.

Wt: 1,320 g

Fat: Good

Wing L: 44.9 (L)

Span: 149 cm

Pr. L: 10- 31.3 W 7- 30.1

9- 31.8 " 6- 28.6

8- 31.5 " 5- 26.1

Tail L: 17.4 cm

Tarsus: 6.55 (L) Toes In: 4.82 Out: 5.91 Mid: 6.19

Head L: 13.79

Hail: 0.67

Bill L: 5.99

Post Nares: 3.59

Bill W: 1.28

Gape: 3.40

Bill D: Gonyx: 2.08

ant Nares: 2.01 Post Nares: 1.91

Brood patches: Downy

Bill color: UM: 5Y 8/8 LM: 5Y 8/8 Spot: 15

Eyering: 5RP 8/2 + 5Y 8/8 (dom.) PY-L

Irides: (10YR 7/4 DEF) 5Y 8/1 G

Pigment 4 ←

Legs: 5RP 7/4

Remarks: Shot on territory. Medium Fish  
in stomach. P<sup>o</sup> 10-1

6

Lg

D. A. Bell

Catalog

172533

*Larus glaucescens*

Langara Light Station, Langara Island, Queen

13 June 1990

Skin  
Only♀ Sova > 0.45 cm  $\phi$ ; 3 ova > 0.60 cm  $\phi$ ; 4 ova > 0.40 cm  $\phi$ ; 5 ova > 0.20 cm  $\phi$ 

935 G

Moderate

41 (L)

29

27.7

29.4

26.0

28

24.1

16.7

5.91

4.22

5.67

5.48

12.71

0.52

5.86

3.66

1.22

3.00

1.95

1.84

1.77

3

2.5Y  $\frac{7}{12}$ 2.5Y  $\frac{7}{10}$ 

14

5RP  $\frac{4}{4}$  P-D5Y  $\frac{8}{2}$  = G10YR  $\frac{2}{1}$  DGF10RP  $\frac{5}{4}$ 

Shot off 3 egg nest. From pair #7. No tissues.  
taken, no skeleton saved. Stomach empty.





Lg

*Larus glaucescens*

714

Location: Langer Light Station, Langer Island.

Left  
Wing  
+  
Skull

Date: 13 June 1990

Sex: ♂ LT: 1.72 x 1.59 x 1.40 RT: 1.37 x 1.11 x 0.94 cm

WT: 1,235 G

Fat: Good

Wing: 42.7 (R)

Span: 145 cm

Pr L 10 - 29.7

Pr - 28.7

9 - 30.4

6 - 27.2

8 - 30.4

5 - 25.1

Tail L: 17.5 cm

Tarsus: 6.27 (L) Toe to An - 4.55 Mid - 5.94 Out: 5.70

Head L: 13.17

Heel - 0.64

Bill L: 6.13

Post Nares: 3.55

Bill W: 1.42

Cape: 3.55

Bill D - Comp - 2.17

Ant Nares: 2.12

Post Nares: 2.02

Brood Patches: 3

Bill color: UM - 2.5Y 7/10 LM - 2.5Y 7/10 Spot - 14

Eyering: 5 RP 5/4 P-D

Lides: 5Y 8/2 - G

Pigment: 10YR 3/2 DGF

Legs: 10 RP 6/4

Remarks: Shot off colony. Left wing + right primaries saved only. Stomach 1/2 small (3") sand laves.



Lg

D. A. Bell

Catalog

*Larus glaucescens*

715

Location: Cox Island, Cloak Bay, Langara I.

Date: 14 June 1990

Sex: ♀ 600g 70.25 cm p. Oviduct enlarged

Wt: 1,035 g

Fat: Moderate

Wing: 42.1 (R)

Span: 138 cm

Pr L- 10- 29.5

7- 27.8

9- 30.2

6- 26.2

8- 29.3

5- 24.3

Tail L: 16.3 cm

Tarsus: 5.57<sup>(A)</sup> Toe L- 4.01 Mid- 5.23 Out- 5.16

Head L- 11.89

Hail- ~~5.5~~ 0.55

Bill L- 5.37

Post Nares- 3.12

Bill W- 1.20

Cape- 2.83

Bill D- Gape- 2.01

Ant Nares- 1.95 Post Nares- 1.82

Brood Patches: 3

Bill Gln LM- 2.54 No LM- 2.54 No Spot- 14

Eyering: 5RP 5/6 PF-M

Irides: 5Y 8/3 G

Pigment: 10YR 3/2 DGF

Legs: 10RP 6/4

Remarks: Shot from boat. P° 10-4, 1. Stomach empty.



Lg

D.A. Bell

Catalog

*Larus glaucescens*

716

Location: Cox Island, Cloak Bay, Langara I.

Left

Date: 14 June 1990

Wing

Sex: ♂ LT: 1.49 x 0.99 x 0.99 RT: 1.37 x 0.91 x 0.88 cm

+  
Head

Wt: 1,250 g

Fat: Moderate

skeleton

Wing: 44 (R)

Span: 143 cm

Pr L - 10 - 30.5

7 - 29.2

9 - 31.2

6 - 27.7

8 - 30.9

5 - 25.6

Tail L - 17.3

Tars: 6.20 (R)

Tars L - 4.35 Mid - 5.77 Out - 5.72

Head L - 13.31

Hail - 0.71

Bill L 5.98

Post Nares: 3.68

Bill W 1.36

Cape: 3.44

Bill D - Gony - 2.07

Ant Nares: 2.00

Post Nares: 1.98

Bill Patches: 3

Bill Wh UM 2.5Y 7/10 LM 2.5Y 7/10 Spot 14

Eyes: 5RP 4/4 P-D + 5Y 8/3 Y-L

Irides: 10YR 7/1 DG 1/2

Pigment: 5Y 8/1 G

Legs: 10RP 6/4

Remarks: P° 10-4, 2-1. Stomach 1/2 full of sand larvae.

Shot from boat.



Lg

D. A. Bell

Catalog

*Larus glaucescens*

717

Location: Cox Island, Cloak Bay, Langara I.

Date: 14 June 1990

Sex: ♀ 15 ova &gt; 0.20 cm b

Wt: 1,055g

Fat: Moderate

Wing: 41 (L)

Span: 136.5

PR L- 10-28.5

7-26.7

9-29

6-25.2

8-28.2

5-23.6

Tail L- 26.2

Tarsus: 5.83

Toes dn- 4.23

Mid- 5.62

Crest- 5.44

Head L- 12.27

Hail- 0.58

Bill L- 5.57

~~Bill~~ Ant. Nares: ~~3.55~~ 3.55

Bill W- 1.29

Gape: 2.79

Bill D- Gonyx: 1.88

Ant Nares: 1.78

Post. Nares: 1.70

Brood Patches: 3 quarter-size.

Bill color: UM-2.5Y 7/12

LM-2.5Y 7/12

Spot: 14

Eyering: 5 RP 6/4 - UP

PY-M

2.5Y 7/10 - low.

Irides: 5Y 8/1 - G

Pigment: 10YR 3/1

LG 3/4

Feet: 10 RP 6/4

Remarks: P-10-4. Shot from boat Stomach w/ fish

bones + Chiton shell. Pin worms in stomach





L9

D.A. Bell

Catalog

172538

*Larus glaucescens*

718

Location: Cox Island, Cloak Bay, Langara I.

Skin  
only

Date: 14 June 1990

Sex: ♀ 8 ova &gt; 0.20 cm ⌀;

Wt. 1,050 G

Fat: Good

Wing: 42.5

Span: 141 cm

Pr. L- 10- 28.6

7- 26

9- 29.3

6- 25.3

8- 28.7

5- 23.4

Tail L- 16.6

Tarsus- 5.67 (L) Toe d- 4.39 Mid- 5.72 Out- 5.64

Head L- 12.36

Hd- 0.67

Bill L- 5.65

Post Nares: 3.54

Bill W- 1.22

Gape: 2.96

Bill D- Gonyx: 1.91

Ant Nares: 1.83

Post Nares: 1.74

Brood Patches:

Bill color UM: 2.5Y 7/10 LM: 2.5Y 7/10 Sp: 14

Eyering: 5 RP 5/4 P-D

Aides: 5Y 8/2 - G

Pigment: 10 YR 2/1 DG 3/4

Legs: 10 RP 5/4

Remarks: Shot from boat. Stomach ~~was~~ 7/ sand lance.



Lg.

*Larus glaucescens*Buldir Island, Rat Islands, Aleutian Islands,  
Alaska

skelaton

27 June 1990

R. wing

♂ Taster < 0.4 ~~cm~~ cm

1,550 gms

Heavy

46 (L)

154

31.4

29.7

32.7

28.1

31.3

26.2

17.5

6.71 (L)

4.75

6.49

6.39

14.45

0.65

6.42

4.11

1.55

3.30

2.30

2.21

2.12

3

2.5Y 7/10

2.5Y 7/10

Cbr 15

SRP 5/6

P-D

10YR 8/3

SY

10YR 3/2

MB 3/4

10RP 6/6

Collected by Vernon Syrd (USF&amp;WS).

Stomach 1/4 full w/ medium fish bones.

L &amp; K tissue saved.

P° 10-4, 2-1.



Lg

D.A. Bell

Catalog

*Larus glaucescens*

Buldir I., Rat Islands, Aleutian Islands, Alaska

27 June 1990

♀ Ova &lt; 3mm

Skeleton  
+

Wing

1,175

Fut: Geop

43.2 (R)

138

29.2

28.1

29.9

26.1

29.5

25.0

16.5

6.15 (L)

4.43

5.91

5.91

12.91

0.64

5.81

3.47

1.26

3.03

2.18

2.09

1.92

3

2.5Y 8/10

2.5Y 8/10

Color 14

5RP 6/6 P-D

10YR 8/3 SY

10YR 4/2 ~~LE 1/4~~ / Pigment Sparse LE 1/4

10RP 7/4

Shot by Vernon Byrd. Remains of Storm  
Petrel in stomach



Larus glaucescensBuldir Island, Rat Islands, Aleutian Islands,  
Alaska

27 June 1990

Skeleton +  
L. Wing

♂ L. Testes 1 X 0.70 X 0.35 cm RT: 0.70 X 0.50 X 0.30 cm

1,440 gm

Moderate

44.8 cm (R)

148 cm

30.5

29.1

31

27.8

30.5

26.3

17.4

6.41 (L)

4.87

6.13

5.99

14.08

0.64

6.33

3.71

1.45

3.83

2.27

2.23

2.11

3

2.5 Y  $\frac{7}{10}$ 2.5 Y  $\frac{7}{10}$ 

Color 15.

5RP  $\frac{8}{2}$ 

L PF

(LPY?)

10 YR  $\frac{8}{3}$ 

SY

10 YR  $\frac{4}{2}$ LG  $\frac{1}{4}$ 10RP  $\frac{7}{4}$ Shot by Vernon Byrd. Fish matter in  
stomach.  $\frac{1}{4}$  full.





*Larus glaucescens*

Buldir I, Rat Islands, Aleutian Islands, Alaska

Skeleton -  
L. Wing.

27 June 1990

♀ ova &lt; 2mm

1,300 gms

Heavy

42.8 cm (L)

139 cm

29

27.8

29.4

25.5

28.8

24.6

15.4 cm

6.33 (L)

4.76

6.34

6.21

13.50

0.59

5.98

3.87

♂ 1.32

3.28

2.13

2.06

1.79

3

2.5Y 8/12

2.5Y 8/12

14

5RP 5/6 PD

10YR 8/4 SY

10YR 3/2 MAG LGF

10 RP 6/4

P. 10-3 Shot by Vernon Byrd.

Big wad of fish/invert stomach in stomach (Halibut stomach?).



*Larus glaucescens*

Buldir I., Rat Islands, Aleutian Islands, Alaska

Skeletal +  
R. Wing.

27 June 1990

♀ ova < 3mm  $\phi$ 

1,240 gm

Heavy

42.4 cm (L)

142

29.6

28.7

30.2

26.5

29.8

25.4

16.7

6.30 cm (L)

4.46

5.86

5.68

12.90

0.62

5.88

3.63

1.26

3.64

2.02

2.01

1.92

3

—

—

14

P-M

10 YR 8/4 SX

LG 1/4

—

Shot by Vernon Byrd. Stomach empty.



*Larus glaucescens*Buldir I., Rat Is. Group, Aleutian Islands,  
Alaska

27 June 1990

♂ Testes &lt; 0.50 cm ♂

1,450 gms

Good

44.9 cm (L)

146

30.4

29.8

31.1

27.9

31.0

26.4

17.7

6.28

4.57

5.95

~~5.75~~

5.75

13.85

0.71

6.76

3.72

1.34

3.19

2.24

2.12

2.06

3

2.54 7/10

2.54 7/10

14

5 RP 5/6 P-D

10 YR 8/4 - SY

10 YR 5/2 LGF (sparse!) 1/4

10 RP 6/4

P° 10-4, 2-1. Shot by Vernon Byrd.

Stomach empty.



*Larus glaucescens*

Buldir I., Rat Island Group, Aleutian Islands,

Alaska

Skeleton  
+ L. Wing.

27 June 1990

♂ Testes &lt; 0.50 cm

1,575 gms

Heavy

44 (R)

147.5 cm

29.3

28.4

30

26.6

29.4

25

16.4

6.84 (L)

4.79

6.43

6.27

14.28

0.81

6.61

3.99

2.26

2.25

2.13

3

25Y 7/10

2.5Y 7/10

15

5 RP 6/6

M-P

10YR 8/3

SY.

10YR 4/2

LE 1/4 (EF)

10 RP 6/4

P° 10-4 (3 in sheath) 2-1;

Bill W: 1.15

Gape: 3.78

Stomach contains 1/8 fish matter.





*Larus glaucescens*

Buldir I., Rat Islands, Aleutian Islands, Alaska

27 June 1990

♂ Testes &lt; 0.50 cm

1,575 gms (1,450 gms)

Good

44.3 cm (R)

148 cm

30.2

29.7

30.7

27.5

30.2

26.0

18.0 cm

6.82 cm (L)

4.48

6.02

6.03

14.17

0.60

6.62

3.77

1.57

4.01

2.38

2.37

2.16

3

2.5 Y 8/10

2.5 Y 8/10

15

5 RP 5/4 M-A

10 YR 8/4 SY

10 YR 4/2 LBF (1/4)

10 RP 6/4

115 gms (w/out lead) Aulet in stomach.

Shot by Vernon Byrd.



Ly

*Larus glaucescens*

727

Location: Buldir Island, Rat Islands, Aleutian Islands  
AlaskaSkeleton +  
L. Wing

Date: 27 June 1991

Sex: ♂ LT 0.95 x 0.60 x 0.40 RT: 0.70 x 0.50 x 0.40

Wt: 1,500 gms

Good

Wing: 45.2 (L)

154 cm

P.L. 30.1

31.0

31

30

31.6

28.5

Tail: 17.3 (few gray flecks)

Tarsus: 6.56 (L)

6.26

6.21

Hind L: 14.4

0.51

Bill L: 6.25

3.90

Culmen: 1.44

3.31

Culmen: 2.23

2.15

2.00

Bill: 3

Bill: 2.54 7/10

2.54 7/10

15

SRP 4/6 P-D

10YR 8/4 SY

10YR 4/2 LE 1/4

10 RP 4/4

Shot by Vernon Byrd (USF&amp;WS).

Stomach empty. P-10-4, 2-1



D. A. Bell

1990

Journal

List of Localities  
California  
Washington  
British Columbia



# Field Notes

Douglas A. Bell

1990

Marin Headlands, Marin Co., Calif

March, April, May

Mendocino Co., Humboldt Co., Calif.

April, May

San Francisco-Oakland Bay Bridge, Alameda & San

Francisco counties, California

May, June

Pine Canyon, W of Mt. Diablo, Contra Costa Co., California

May

Tatoosh Island, near Cape Fattery, Clallam Co., Washington

24-28 May

Langara Island, Queen Charlotte Islands, British

Columbia, Canada

5-17 June

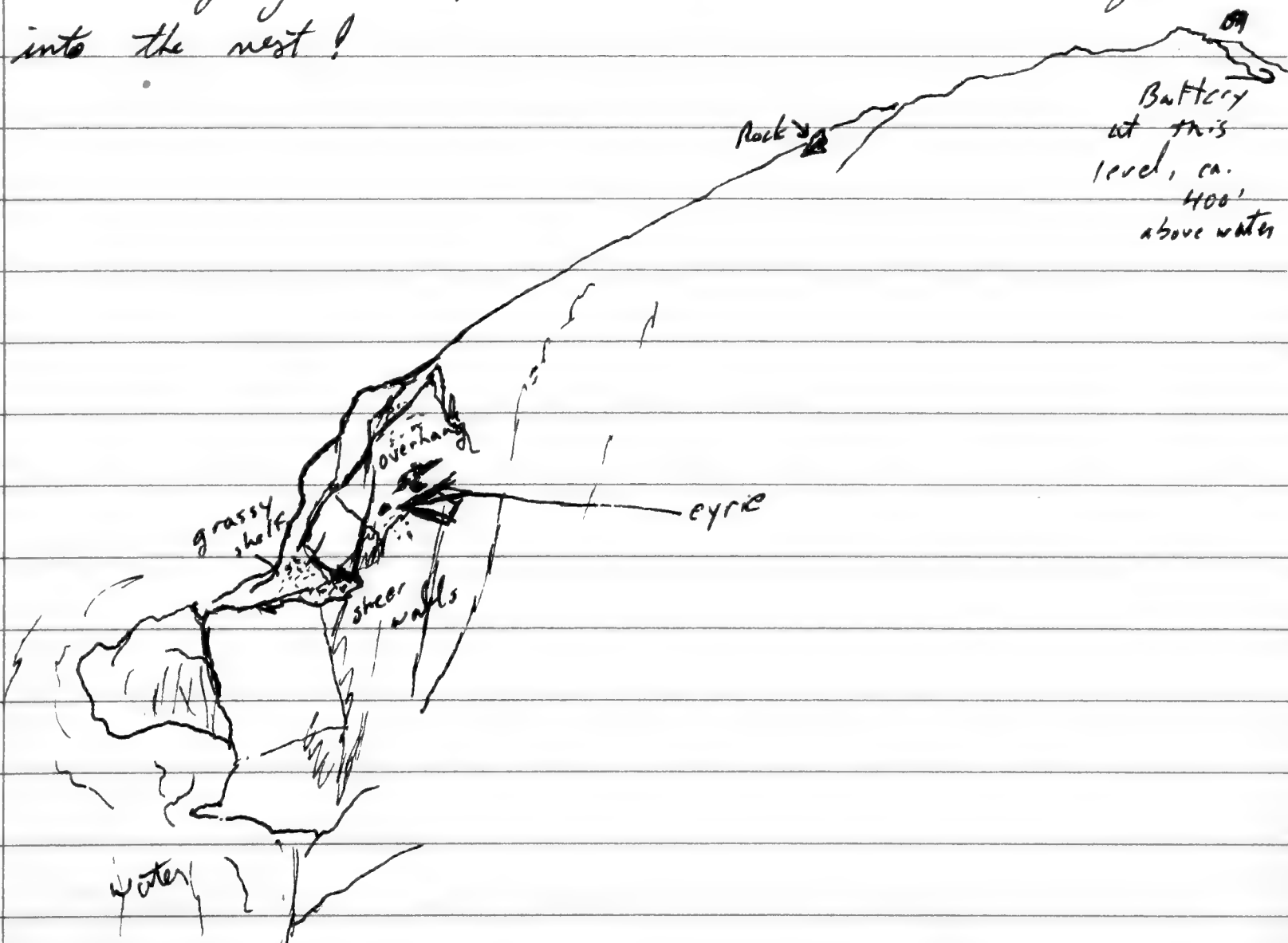




28 March 1990

At Battery Spencer, 3rd lowest bunker, closest to Golden Gate Bridge, Marin Headlands, Marin Co., California.

10:55. Observing Peregrine Falcon eyrie from lowest bunker, looking through west-facing windows of bunker, at east-facing cliff of little cove just W of Golden Gate Bridge. The cove is formed by steep slopes dropping off precipitously from Battery Spencer. Most of the slopes (W+E) are loose rocky, strewn with eroded crevasses and having steep faces interspersed. The eyrie itself is on a relatively sheer face that rises up from the water about 130 feet. The eyrie is on an old Raven nest, about 30 feet below the crest of the cliff face, in an overhung crevasse. One has a good view of the nest from the bunker, when angling the scope down about  $45^\circ$ . Can look right into the nest!





28 March 1990

David Gregorie said 1<sup>st</sup> egg was laid on Sunday, March 25; and 2<sup>nd</sup> egg laid yesterday, March 28. One egg is reddish brown, typical in color, the other egg is very light, almost dirty grey. Light egg: 1<sup>st</sup> egg; 2<sup>nd</sup> egg: darker one.

10:55-11:15. Blue banded falcon (left leg) sitting on nest, not entirely covering eggs. Very attentive, watching everything flying past. Fishermen on the rocks below don't seem to bother her.

11:15 another falcon flew by (imm?).

11:16 Blue-banded bird stood up, launched off the nest, but returned ~1/2 in a minute. Half-standing over both visible eggs.

11:25 - Falcon on nest gave short, disturbed heek-heek call as imm. Red-tail flew over slope. She is now fully sitting on eggs, very actively looking about, but appears somewhat more "relaxed" now.

David said the tiercel of this pair has a silver band on its Rt. leg; falcon has blue band on Lft. leg. I think he mentioned that the falcon's cere is deeper yellow than the tiercel's.

11:30-11:50 - Falcon still sitting tight on eggs.

11:58 - Falcon looking intently up at something.

11:59 - Tiercel just landed on handrail of gangway around North Tower, above 1<sup>st</sup> horizontal brace.

12:00 - Heek-heek heard, tiercel launched off tower and joined falcon chasing ~~imm~~ Red-tail. Both stooping on it, forcing it around cone. Great views of both penguins. The ♀



28 March 1990

flew back to N. tower, sat on hand rail. Screamed hunger  
wail, then <sup>launched off bridge. The tiered</sup> returned to nest after ca. 1-2 minutes. ~~He~~ He  
first stepped down on the light egg, rolled it under him, then  
rolled the darker egg from his right side under his body.

12:05. <sup>Falcon</sup> ~~Falcon~~ back on rail of N. Tower. <sup>Falcon</sup> ~~Falcon~~ sitting  
relaxed on hand rail of N. Tower. Somewhat light yellow legs  
& cere, <sup>reddish-</sup> ~~pink~~ yellow eye pocket. Clean breast, very neat  
barred flanks, ~~light~~ belly spotting. Thick, wide males,  
with just slight white patches behind nape, essentially  
breaking a clean cap from bottom of nape to back of  
head. i.e. Otherwise, cap would be complete. Creamy breast,  
w/ just a tinge of very light pink.

12:40 - Falcon looked at something of keen interest, then  
launched off tower. Gave couple E-chuck calls,  
circled directly over bunker, then over cone slopes.

Went back to N. tower, but landed on rail at  
very top this time. Defecated, then flew off, landed  
on hand rail of suspension cable, 2 cables down  
from top of N. Tower.

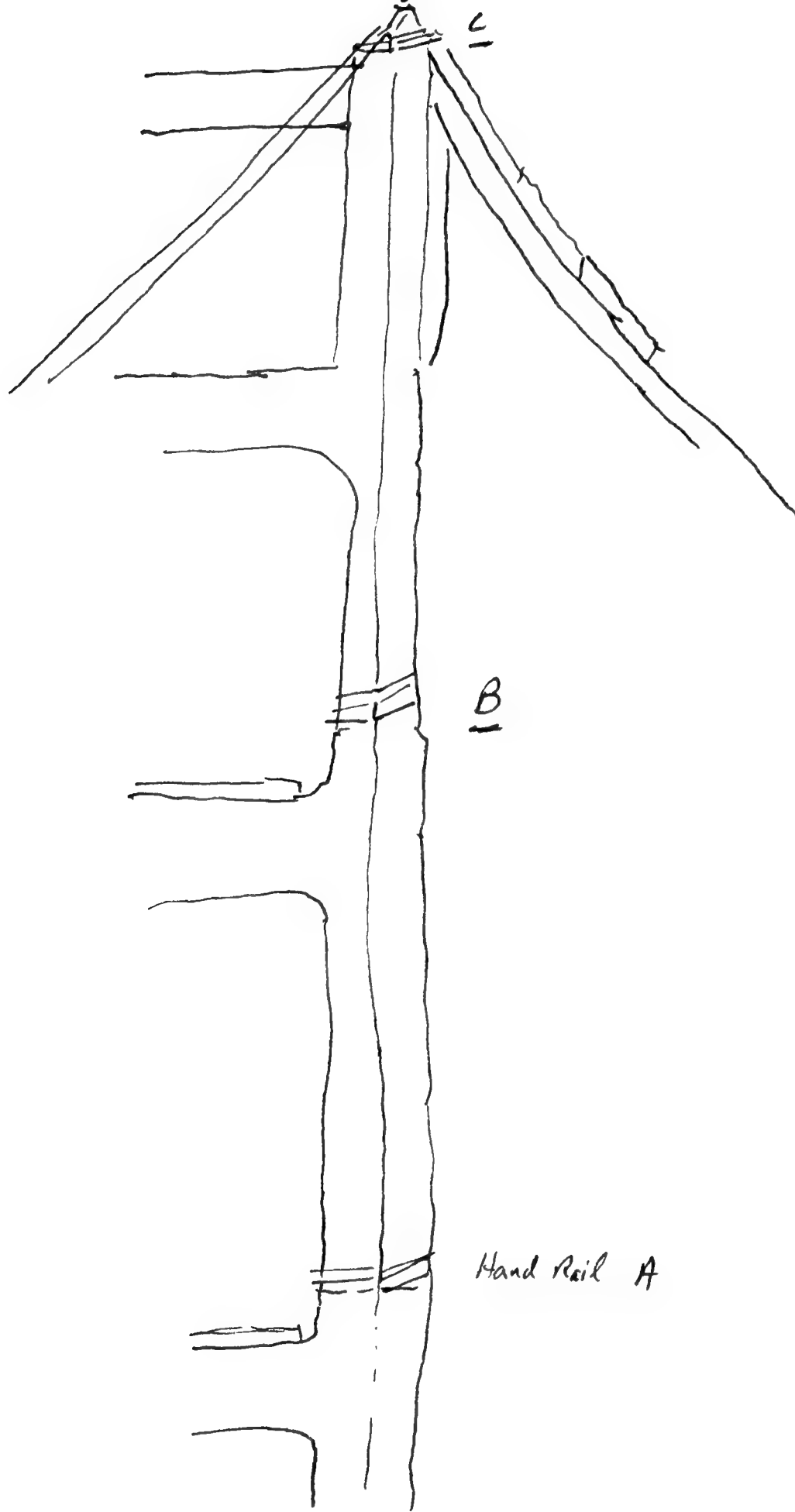
12:45. Tiered still sitting tight on eggs. He's been on  
nest since the falcon left it to chase the Redtail at

12:00. The tiered definitely has a yellower cere than  
the falcon.

12:50. Falcon moved back to hand rail on N. Tower,

12:54. Falcon disappeared.

12:55. Tiered preening with the nest. Interesting, tiered  
has sat tighter on nest than female, covering & "incubating"



28 March 1990

the eggs. To recap: falcon on nest 10:55 - 12:00. Trierel on nest 12:00 -

13:10 - Trierel stood up, pushed egg farther underneath him with bill. Falcon reappeared on N. tower handrail.

13:43. Trierel off nest, circled low along water, then used wind to soar up cove slope. Circled coupled times in front of cove & bridge. Heard screaming. At one point he did long shallow stoop in to cliff below our obs. bunker. Falcon had also left tower, but reappeared on N. tower handrail. Trierel back on nest by 13:46; settled on eggs, bobbing head. 13:55. Falcon off.

14:00. Falcon spotted on grassy clump in cove below obs. point. She was picking at feet. Sat on clump about 3 min., then flew up to nest. 4-chucks, hunched backs. Trierel left, falcon settled on eggs. Trierel back to bridge, then off again, headed west out over straight, then around point to Kirby Cove.

14:08. Trierel back on N. tower, handrail A. He has a very black cap. Nearly complete w/ melan stripes.

14:20. The 3 fishermen hiking back up ridge. They're passing along the spine of the ridge where the eyrie is. The trierel launched off the bridge & flew west, passing over the ~~fishermen~~ fishermen. Falcon on nest did not seem disturbed; even dozed a bit.

14:45. End of obs. Falcon still on eggs.





April 7, 1990

At Battery Spencer (lowest bunker); Marin Headlands,  
Marin Co., Calif. Just NW of Golden Gate Bridge

14:15 - Tiercel Peregrine incubating on nest. Weather is  
overcast, 100% cover; low ceiling. Fog lifted about 1 hr.  
ago. Tiercel very attentive, looking about. Power boat  
races are underway on the bay, underneath Golden  
Gate Bridge. 100's of people on bluff at Battery Spencer,  
spectators everywhere, helicopters, planes, 100's boats

14:25 - Tiercel kek-kek-kek call at Turkey Vulture,  
but remained tight on nest.

14:29 - Tiercel turned eggs.

15:00 - Tiercel still on eggs. No sign of falcon today -  
looked at bridge, but didn't see her at the usual spots.  
Maybe all the helicopters forced her to take refuge  
on a cliff.

Chronology of egg laying:

|         |                   |                     |
|---------|-------------------|---------------------|
| 1st Egg | Sunday, March 25. | Light-colored egg.  |
| 2nd Egg | Weds., March 28.  | Normal colored egg. |
| 3rd Egg | Friday, March 29. | " "                 |

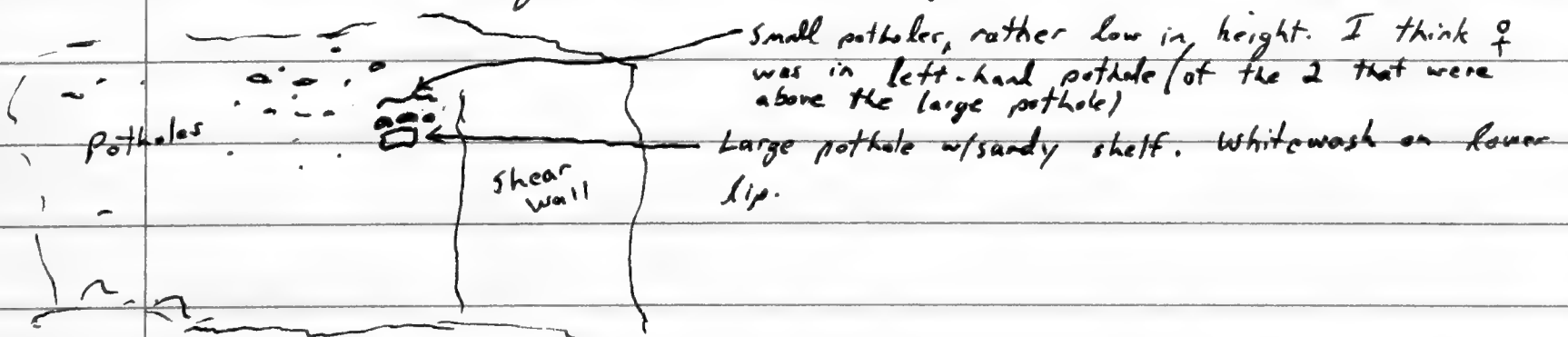
Average laboratory incubation of Peregrine eggs is  
33 days. So expect first eggs to hatch by  
Wednesday, May 2.



April 8, 1990

14:00 - 14:20: At Squaw Rock, Highway 101, 10 mi. S. Hopland, CA; Mendocino Co., CA. Lots of evidence of Peregrines "in residence" on the rock. Whitewash on many places, including the shelf area where they have nested before. Maren thought she heard peregrine screaming. and I did to, when a raven flew in to the traditional stick nest at lower left corner of rock face. The raven ~~hopped~~ hopped onto the back of its incubating mate, appeared to feed it by regurgitation, and the mate.

17:15 - 17:45: At Redway Rocks, along Briceland Road, ca. 5 mi W of Redway, Humboldt Co., CA. Set up on bluff behind road, looking across creek towards the cliffs. After about 10 min. heard wailing scream - sounded like hungry female. Screams were coming from left series of cliff. Last year they were on the right series of cliff. Then heard male scream. Saw him fly in front of cliffs. Falcon (♀) appeared at small pothole on left cliffs. When I went to switch from binos to scope, she was gone, but the tiercel continued across the cliffs, soared up above the ridge line, then powered off to the SE along the creek drainage.





April 9, 1990

07:50 - 08:30 : at Goat Rock, on Benbow/Phelps Ranch, Humboldt Co., CA. Weather calm, clear, sunny. Very thin cloud cover (<40%); fog sitting in the valleys like a finger of lakes. Birds singing all around: meadowlarks, Stettins larks, Robins, Lazuli Buntings. Flicker, Downy Woodpecker, Pileated Woodpecker calling. Blue Grouse drumming. Ravens seem to be very much "at the rock". Sitting in fir tree off to the left side. A Raven's "bis up" call frequently heard. Roosts crowing from house below rock. No real sign of peregrines at rock. At least, a minute amount of whitewash on ~~left~~ right inner side of the path. I thought I might have heard a "wail" when I first sat down at obs. post on ridge below rock - but now I rather doubt it. Red-tail Hawk screaming, Kestrel calling, but no peregrines. Pair of Ravens seem to be prospecting on the rock - hopping here & there. Checking out branches. Western Flycatcher heard.

ca. 13:00 - After Todd, Luther and I had spent the morning giving shots and ear tags to about 100 cattle and calves, we drove them with horses along road past Goat Rock. It was hot & sunny. What looked like a tiercel ad. peregrine soared over from the rock, sort of interested in our commotion. He seemed to follow above the herd, before eventually circling up high enough and disappearing off to the NE.



April 9, 1990

ca. 16:30-17:30. Todd and I went to the top of Goat Rock, and set up our lines. No sign of peregrines. I rappelled down the cliff first, to the large pothole. The pothole looked very deserted. Only tracks of centipedes in the sand and a few old bleached bones. No scrape, and no real "falcon" footprints. Two small patches of whitewash, both looked rather old. After I went down, I scrambled back around the rock to the top and let Todd try rappelling. He did just fine. During our whole stay on the rock no peregrines appeared.

19:30 On our drive out we came upon a single Wild Turkey and ca. 20 deer near the ranch gate.

April 10, 1990

Went to the Bay Bridge, SF. Bay, to collect Peregrine Falcon eggs with the Santa Cruz Predatory Bird Research Group. David Gregoire estimates the pair began hard incubation on Monday, March 26, 1990.

Met Brian Walton, David Gregoire, Lee Aulman, and a host of newspaper reporters at the Cal. Trans building beneath the bridge in SF. K60 Newstalk Radio, K60-Ch. 7 news, SF Examiner, and National Geographic were all there. We proceeded to the central cement-pillar anchorage of the bridge, in the middle of the suspension portion. The falcons were in the same metal box beneath the east catwalk below the lower deck of the bridge.





April 10, 1990

The falcons began flying about as the whole entourage made its way over the side of the bridge. They were pretty quiet, but were the most defensive I had ever seen them - making fast dives between and thru guy-wires & girders to pass right before our faces. Also, they often landed on girders to watch our progress. Lee Culman pulled 4 eggs out of the scrape. One appeared cracked, one pitted, the other 2 OK. The press got lots of good shots of the birds, and the Natl Geographic group filmed us during a couple repeat ~~shots~~ takes from different angles. Quite a circus out there.

We were interviewed and photographed quite a bit. SF Examiner ran a front page story the next day. The Examiner was quite accurate (concerning the pesticides and ever present problems with DDT & eggshell thinning). The evening Ch 7 news was "so positive" about the success (saw myself on TV!).

If the peregrines relay, we can expect first eggs beginning April 24th. David Gegois feels the birds will relay.

Update: May 4 - David thinks the birds began hard incubation on or about May 1st or 2nd.

All 4 eggs hatched (that were taken on ~~April 10th~~).

April 10th). The eggs hatched Wednesday April 25, 3 hatching at the same time, one hatching later.



May 3, 1990

at Spencer Battery, Golden Gate Natl. Rec. Area,  
Marin Headlands, just N. Golden Gate Bridge, Marin  
Co., Calif.

10:00 AM - Met Alan Fish & Alan Harper at the bunker.  
Came out myself with Joe T. Marshall. Alan Fish  
said they saw all 3 eggs in nest yesterday, May 2.  
We know the ♀ laid eggs on 25, 28 & 30 March.  
So the eggs should be at hatching. The falcon is on  
the nest, facing out from the cliff. She kind of has the  
appearance of a broody hen: very wide, flat body.  
The wrists and wings almost "droop" from her body,  
one can see her flank or under-~~car~~ wing coverts  
probing through her flanks to the tops of her wings.  
Her breast is very wide. She's at best dozing  
every now & then. Then she looks about at gulls,  
etc. It's very foggy, often hard to see the  
nest. She literally hasn't moved from

10:00 AM - 12:00 noon. At 12:00 she began picking  
at the nest rim. Did this for about 5 min.

Then she sort of stood up, and tried tucking eggs  
under her; ~~So~~ they were pretty far up on her  
breast, she moved them further under her belly.

Saw only 2 eggs. Then she stood up & scrambled  
around 180°, looked cramped on the nest. Her  
tail was facing out, head into cliff. I missed  
the view of her nest, but think I saw  
only 2 eggs. Then just after she settled in this



May 3, 1990

position, I looked away. Only to peek back when she had already stood up and moved back another 180° to her original position - facing out from cliff. Then she stood up and pushed eggs further under her belly. I think I saw all 3 eggs.

12:37: ♀ stood up, moved eggs with bill. Unfortunately, I looked too late, still think I saw only 2 eggs.

13:37: Female just hopped off the nest as I looked in. All 3 eggs in full view in "empty" nest. The tern was on the nest w/in a minute, and settled on the eggs. No sign of hatching.



May 6, 1990

At Treasure Island, Info. Booth & Museum, just outside entrance to the naval base (gate). SF. Co., CA

07:00 - Falcon sitting on catwalk (traveling apparatus)

③ SE side, just E of Suspension Tower 5 (the first tower E of Central Cement Anchorage of

bridge. David Gregoire saw this bird first appear at the catwalk @ 06:37. He watched the bridge from 06:00 - 06:50. The bird may have eaten something at a cache.

07:12 - Walked over ~ 3' along catwalk (falcon), still on SE side.

07:20 - Falcon out of view, but possible head movement visible - flicking?

07:45 - Falcon now completely visible.

08:00 - Preening.

08:40 - Falcon stretched, flapped wings, then took off. Flew under bridge to N side, and along bridge at road level to the west, at least as far as the cement anchorage. I lost sight of it. But, turned scope back to the Tower 5. Then the falcon appeared, flew up into the center portion of the girders, east side of Tower 5, below road. About 30 sec. later another bird came out of same area. Actually looked smaller, it flew up to moving catwalk, but could not see it. So I may have been watching the ♀ all morning, and she just went back to nest site to relieve incubating ♂.

08:50 : ♂ on SE corner of N-catwalk.





May 6, 1990

Update on Golden Gate Peregrine Eerie:

Yesterday (May 5), David Gregorie and helpers were at the eerie in the afternoon. At 16:30 the incubating ♀ came off the nest and received a meadowlark (?) from the ♂. The ♂ went to the eerie to incubate. ♀ flew to ~~bridge~~<sup>cliff</sup>, ate lark, disappeared. 70 minutes later she reappeared chasing a Band-tailed Pigeon right past the eerie, but did not get it. She flew back to the bridge, then soon was off at a gull. She harassed the gull, then chased a small passerine, catching it, she then returned to the bridge and ~~she~~ cached her kill. Soon she was off at another gull, this time she pounded it into the water (defensive screaming). Finally, at about 17:15 she went back to the eerie to relieve the ♂ and continue incubating.

Today, May 6, while talking to David over the phone he got another call saying that one of the Peregrine eggs had hatched! This hatched at about 11:15 AM → approx. 37 days after "hard" incubation had begun! WOW. ———

1

2

May 10, 1990

11:30 - 12:30

Went to San Francisco, to meet Peregrine people from Santa Cruz. Plan was to remove Peregrine eggs. Caltrans people took us out. We went to the 1st Tower E of central cement anchorage (where eyrie was last time) on SF side of span (Yrba Buena I → SF). Brian Walton - "Jeep" came along. This time Jeep and I went with Duke Chatham (Caltrans) across a girder to the "box" at center of tower. Crawled along the girder above water → pretty neat. Jeep had to crawl into the box. Pulled 3 good eggs and one smashed egg. We got good views of the adults. The falcon had a soiled breast, due to yolk & junk from the broken egg. Duke got to watch the birds thru the bins. A reporter from channel 5 was there, put us on 18:00 news, along w/ Lee & Caylen Rowl, as they placed peregrine chicks in Prairie eyrie on Mt. Diablo.

13:00 - 14:00 - I went to Golden Gate Bridge, sat at Battery Spencer to watch the Peregrines on cliff w/ Raven nest. Falcon brooded young for first 20 min, even closing her eyes every now & then. Then she left the eyrie, flew to soar. Moved over to G.G. Bridge, went into 400' vertical stoop past spot where tiercel was sitting below the roadway. I had seen him wander



May 10, 1990

over to below the roadway from the N. Tower).  
Lost of ~~side~~ sight of the falcons. About 10 min  
later, after getting good view of all 3 downy  
young, I returned, fed young, then brooded  
them for ~~remainder~~ remainder of observations.

On my drive home I thought I caught a  
"glimpse" of a Peregrine on the San Rafael  
Bridge.



- At Pine Canyon to check on Prairie Falcon eyrie. Dorothy (the watcher) said the adults were ignoring chicks.

May 18, 1990

Pine Canyon, near Castle Rock Park, Mt. Diablo St. Park,  
Contra Costa Co., Calif.

Betty + Bob Gallagher. Everette Utherback. → Watchers

16:43

~~5:40~~ PM - One entry to nest, ♀ sat on edge of Pothole, looked around. Sat ca. 10 min, then flew off.

17:02 - Falcon returned to Pothole.

17:40 - Suddenly both falcons appeared. Triel transferred rodent to ♀, she then flew into the pothole, the other bird sat on a pinnacle. After a while, the bird in the pothole came out and joined the other one on the rocks. All previous observations from above watchers.

18:15 : I arrived. Soon after saw triel carrying food along canyon. Heard screaming. Didn't see any activity at pothole. I then hiked up to a vantage point on a rock pile. Watched eyrie from about 18:30 to 19:20. At ± 18:45 saw ♀ appear at left edge of pothole. She preened calmly (her crop) for ~~10 min~~, 20 min., then looked about for 5 min, then roused, turned and walked to back of pothole out of sight - to brood young. No other activity ~~noted~~.

I left @ 21:30.

The eyrie looks OK, no ~~studies~~ aberrant behavior noted. The Peregrine people from Santa Cruz had removed 5 prairie Falcon chicks on Wed, 5/16, and placed in 2 two week old peregrine chicks (these <sup>from eggs taken April 10th.</sup> resulted from the Bay Bridge pair). The ~~pr~~ prairie eyrie is in different spot this year than last. The

Mt. Diablo -

Prairie Falcon eyries (according to Gary Beeman)

6 eyries

1) Mallard Ranch (1)

2) Morgan Territory (2)

2 eyries → 4 young.

3) Devil's Slide

4) Pine Canyon.

Gary also believes 2 pairs of Prairie Falcons  
are nesting on Rocky Ridge!



May 18, 1990

pothole is at the top of the middle series of major rock faces in pine canyon. The pothole is large, just below crest of rock top, sort of recessed below an overhang. Pothole ca. 5' x 6' in rectangular form.

Cliff Swallows nest in top of pothole. I think this is a traditional site, which the museum has photos of.

Update on Bay Bridge -

On Monday, May 14th, I saw an adult Peregrine bank & turn down underneath Bay Bridge just where the cantilevered section makes a bend, on Oakland side, ca. 1/4 km from Yrba Buena I. I was headed east, on lower deck. ~~Told~~ The falcon was seen on the S. side of bridge. In talking later to Dr. David Grogan, he found it all interesting. Well, today, May 18, he talked to bridge people who saw a pair defending the first tower E of Yrba Buena. <sup>@ 10:00</sup> David went out there at 14:30, watched from Yrba Buena. Saw one food ~~trans~~ transfer → where ad. brought food to "cave-like" hole, on N face of tower, about 8-10' up from a platform and 15' below roadway.

The hole is in the leg of tower. Ladder goes right past it. David saw a falcon in hole → ad. ♀ taking food from ♀?, feeding chicks, not likely. David thinks this is the mysterious Emeryville pair!



May 20, 1990

Departed Berkeley about 12:30. Arrived at Squaw Rock, Mendocino Co. (Highway 101; 10 mi S Hopland) ca. 14:30.

Observed rock for about 15 min. Didn't see any Peregrine Falcons, but the rock looked like it had birds in residence - lots of white-wash. The next ledge looked promising - also w/ lots of whitewash. The ravens nest has at least 2 nearly-fledged young in it.

Arrived at Holms, Ho. Co. about 20:15. Along Eel River. Set up scope on the Peregrine cliff. After ca. 5 min. heard screaming of a young bird! Then saw a fledgling fly across cliff face and land behind isolated clump of pines on cliff. Gorgeous brown.

Roughly 3 min. later saw ad. tiercel come in high over cliffs - cutting a wedge across the sky. He ~~soon~~ landed on a high snag, then launched off again and went into vertical stoop. Disappeared behind trees, but came out low over the Eel R., then flew up to a fir and settled on a horizontal branch.

He plucked and ate a small ~~passerine~~ passerine. Beautiful tiercel - very clean, white breast w/ fine black markings. Black head, white throat, thick cap. Spent night in Arcata, CA.

May 21, 1990 Drove from Arcata Co. to Newport, OR, along 101. Heavy rains in OR!

May 22, 1990 Drove from Newport, OR to Clallam Bay, WA. Weather cleared. Sals at Cannon Beach, OR on nests.



May 24, 1990

On Tatooch Island, off Cape Flattery, WA. Up late 08:30 after a night of banding Leach's and Fork-tailed Storm Petrels. Last night I had set the tent up on the West End colony - at the connecting rocks between the main island and Strawberry Island. One is practically right below the Light House & Fog Horn. Gulls are in process of setting up territories, some nests have been built, and one nest had an egg in it. Rather early still.

For tent location 1, rocky habitat, grass tussocks on otherwise bare rock. One has the impression that most Glaucous-winged Gulls here have darker primary tips. We are still in the nest building & territory delineation stage. Much courtship feeding and copulation going on. I would guess only about half the nests have been started to get built.

13:30 - Watched ad. Bald Eagle cruise the cliff tops of West Tatooch I. It circled back over the Murre colony several times, most murre had left the upper salmon-berg colony at his appearance. Hundreds of gulls were in the air. But at about the eagle's

3rd pass in front of the cliff top a murre jumped out from a ledge further down the cliff face. The eagle had a short, strait stoop of 50' to grab it, which he did. The big bird then had to labor to rise above the whirling gulls, struggling murre in tow. It looked like the eagle dispatched it



May 24, 1990

with lull & storm after it had risen above Tatoosh I.  
The eagle headed off in direction of Fuca Pillar on Cape  
Flattery. As soon as the murrees were off the colony,  
a crow came in to investigate. No eggs yet. Rained  
tonight, so no Petrel banding.

May 25, 1990

Went into my blind set up in the draw between  
the main island of Tatoosh and Strawberry Island,  
west of Tatoosh. Strawberry can be reached at low  
tide, through the intertidal and draws between the two  
islands. My tent is set up overlooking a colony  
situated on a couple ~~a~~ roundish, rocky hummocks  
in the draws between both islands. Gulls are on  
territories consisting either entirely of smooth rock, or  
some rock/low grass patches, and some driftwood/  
rock patches. The "best" territories are on grass/  
soil patches. I almost want to say that the gulls  
on this colony are a bit more "integrated" than those  
on the Tatoosh beach, but this probably isn't  
really the case. Spent most of day categorizing pairs  
of gulls from the blind #2. Ad. Bald Eagle  
came by at least once, disturbing the gulls & murrees.  
Id' another 30 pairs from the blind. In late afternoon  
(c. 15:00 - 16:00) I went back to blind no #1, and  
with the new "old" shotgun (side-by-side Ithaca  
arms - pre-WWII) collected 4 gulls - 2 pair - on  
one shot DAB 703-706. While I was preparing

4 birds / 1 shot





May 25, 1990

the gulls, Maren went fishing with Bob Paine, Tim Wooten, Betsy & Wayne Sousa. Caught rockfish.

Forgot to mention - a Peregrine was seen around 11:00 AM on 24 May; also some Cassin's Auklet carcasses on the beach - clearly Peregrine work. Did Petrel trapping 23:30 - 13:15. In addition to Leach's & Fork-tails, caught 5 Cassin's Auklets!

May 26, 1990

2 birds / 1 shot  
Good rain off & on all day. Went to blind #1 and collected another pair of gulls on 1 shot (DAB 707-708). Spent much of a wet afternoon preparing all six gulls from yesterday & today. In mid-afternoon, like clockwork, saw ad. Bald Eagle come by & grab a murre on the colony. It caught it on the bluff of the colony and proceeded to tear into it right on the spot, until our watching scared it off.

They lit the wood stove in the house today - good, because it was pretty cold and wet all day. Towards evening went fishing around N. Island. We caught Rock Fish & ~~Rock Fish~~ Ling Cod. N. Island has quite another whole two groups of Common Murres. Neat perspective of the island. Also Pelagic Cormorant nests, rather close to our activity, but the nests did not yet have eggs. As for the Murres - it looks like about an additional 500 are on the N. island & associated reefs. Just before dark I heard the heh-heh-heh call of an agitated Peregrine from somewhere off the NE end of Tatook I. Also, at least



May 26, 1990

one imm. & one sub-adult eagle are making regular foraging trips around Tatoosh I.

May 27, 1990

2 birds  
1 shot

Getting ready to pack & leave the island. Collected two gulls on Toad Point (DAB 711-712), 2 birds on 1 shot. Raining. Fair amount of boat traffic - mostly at Cape Flattery, but not as much as expected. Rough seas must be keeping people away. We were picked up by 2 boats at 13:30. Unfortunately, Bob Paine's standard rule from the group at Big Salmon Charters couldn't take people, because someone switched on them not having a "water taxi" license for people. So another fellow had to "donate" his time to pick up the people (us). Ride to Neah Bay went quick, in a "calillai" cruiser. More rain. Back at Neah Bay Tim "offered" to take my specimens into Seattle for me. It paid us up, so Maren and I headed for the ferry at Port Angeles. Black Ball Ferry to Victoria. Made it on the 19:00 Ferry.

Weather calmed markedly. Into Victoria, and the Oak Bay Hotel for a much needed bath & sleep.

May 28, 1990

Sunny in Victoria. We went downtown, then tried to catch ferry to Anacortes. WA over the San Juan. But too late. Only 1 ferry on Memorial Day. So we took a ferry from Swarth Bay to Tsovcassan, BC, thru the Canadian Gulf Hk.,



May 28, 1990

saw 10 Bald Eagles on the trip over. Then drove from BC to Seattle. The area around Delta BC is beautiful - lots of farms and marsh, but it's being developed fast. May 29, 1990 - In Seattle, WA.

~~for~~ May 30 - 31: drove from Seattle to Berkeley, spent night in Yreka, CA with John & Dusty. Total trip mileage: 2,200 miles.

Queen Charlotte Is: Peregrine Surveys:

1970

1975

1980 :

1986 : 56 pairs Boat + Helicopter

1990 : 75 pair

BC 88 Midwinter Bald Eagle Survey

Farr + Dunbar

David L. Dunbar

Ministry Environ

10334-1524 ST

Survey BC V3R 7P8

June 5, 1990

Met Wayne Nelson at ferry at Skidegate. On drive from Sandspit to ferry & Dave Putterill saw 5 ad. Bald eagles. Morning at Putterill's, lots of Swainson's + Varied Thrushes. Islands at ferry crossing had gulls - one w/ ~10 pair, another w/  $\pm$  30 pair.

Met Lorne McIntosh (Habitat Biologist) at Ministry Environment, Queen Charlotte City. Wayne and I talked with him for about 2 hours. Beautiful morning in Queen Charlotte - sunny, calm, hint of clouds from the west. Allan Edie: Wayne wished to get survey results of Q.C.I.'s. from him, but he never called back. From 11:00 - 13:00 drove up to Graham I. to Massett.

Packed, brought supplies. We piled into a Boase at 17:00, flew first ~~to~~ west over Massett Inlet to Lake, crossing tremendous marshy flats. Landed at logging camp.

Then took off, flying west over spine of M. mountains, but low thru valley to West Coast, turned and flew north along West Coast to Langara I. Beautiful view - calm ocean, sunny + ~~rather~~ mixed clouds. Flew to left of Forrester Island, also over a great pinnacle. Landed at Langara Lodge in Hensling Bay.

*Iphigenia Pt.*

Wayne's List:

Beebe, F. L. (1960) The marine Peregrines of NW coast.  
Condor 62(3): 145-1

Nelson, R. W. M. T. Myres (1976). Declines in pops of peregrine  
falcons & their seabird prey at Langara I., B.C.  
Condor 78: 281-293.

Nelson, R. W. (1990). Status of The Peregrine Falcon on Langara I., B.C.  
1968-1989. Canadian Field Nat. 104(2):

Nelson, R. W. (1988). Chpt. 69 of Sacramento book.

\* Veermeer, Sealy, Lemon & Rodway (1984) ICBP Technical Publ. #2



June 6, 1990

Up at ca. 07:00. Beautiful, clear, calm day. Lot of mosquitoes last night in the cabin though. After breakfast Wayne and I sat on beach, talking (see notes) about Langerak. Oh yes, about 07:30 I heard two short screaming bouts of a peregrine - coming from W of us? As we sat on beach, 20 Harlequin Ducks made their way up the beach to the creek. Often flying back to the water if we made fast movement. We got ready with the boat, launched it at 11:20.

Wayne pointed out the old eyrie site at East Fing Bay, which is visible from the beach in front of the cabin. Then we motored off to Cox Island

Cox I.

in Cloak Bay. Wayne showed me the old eyrie cliffs - at Iphigenia, Pinnacles #1, Twins Pinnacles #2, Pinnacle #3 + 4 - all on Cloak Bay, then

Cloak Bay  
Pinnacles  
#1, 2, 3, 4

Cox I, and then Burial Caves, and finally Daedon's just E of the fishing lodge. Cox I was first:

W end and N end (old site from Wayne's thesis) and SW face. Nothing in way of falcons - but 8 Pelagic Cormorant nests of 3 adult on 3 of them + 12 GWW's.

Plus Oystercatchers, nesting on hard rocks. After cruising

Cox Island we went around to Pinnacles 3, then 4, 2 and 1, then Iphigenia (on either side of light post), then to burial cave site just W of lodge, and then we headed east past the lodge and Daedon's (an old eyrie site - long since abandoned just across from Lucy Island). We headed north along coast of Langerak I. Just past the channel between Lucy & Langerak, the coast of

Iphigenia  
point

Burial Caves

Daedon's

Langara: thru 50's

Langara lodge: Henslung Bay

Brooks (1926) ~ 35 pairs nest on 25 miles of coastline of Langara  
(1937) Brooks wrote Hickey, 40 pairs on island  
4 x 8 miles, over 20 climbed by naturalist  
in 1936.

Wayne's rewrite of Beebe's data:

1952: 0/13      1957: 2/13  
Un/checked eye: 1958 5/13 → so 1958 something happened!

1962: Beebe + Jim Anderson + Don Hunter:  
discovered 5~~th~~ murrey sites, pressure off.

1957-1958 - something happened to Langara I. penguins.

1958-59: Gull & Cormorant colonies dropped by 1/2 @ Lightstation.

Wayne (1990):

Rats cause of declines? from { 500,000 (1950's)  
80,000-90,000 (1970's)  
to 22,500 (1981)

- If rats can do this decline, why not finish  
them off by now.

Fury Bay colony: murrelets by and large disappeared in 60's.

- Permanent change in ocean zone. 1958/1959 caused declines  
1957-1958 Japanese current shifted; N. Pacific T° warmed  
to 1970's.

1970's: W. Canadian Ocean Temp. warmed. Food availability for  
seabirds lost  
Salmon Stocks: down thru 70's.

Oceanic Δ's may have caused initial drop in Murrelett pops, rats  
effect significant, but unknown; Murrelett colony stable  
thru 80's.

6 June 1990

Towhee Pt.  
Dibrel Bay  
Andrews Pt.  
McPhearson So.

Largura flattens out. Sites visited along way:  
Toehoe Point, Dibrel Bay (little hidden cliff),  
Andrews Point, McPhearson-South Inlet. Each  
time we went in to cliffs, clapped hands, whistled,  
etc. No birds seen or heard. Plenty of Bald Eagles,  
though. Also saw a few sea lions. At each rocky  
head had several to many pigeon guillemots.

McPhearson  
West.

14:30 We landed at beach between McPhearson East &  
McPhearson W. Hiked to McPhearson W thru the old  
Murrelett camp. Heard screaming of peregrine.  
Then saw, not far away, at the base of a 10' H snag  
first one, then a second downy Peregrine chick. It  
was just like in the books. How simple! The chicks  
appeared to have downy back & heads, but feathers  
on wings & tail - ca 1-2" down from sheaths? (4 week olds?)  
They did fair amount of hunger screaming. At least  
two. As we went back behind the overgrown cliff -  
if you could call it that, we heard the heh heh of  
an adult. Had lunch, then proceeded up to top of  
hill - thru tangles and past logs, rocks, etc. Got  
good views of adults in a double snag. Both  
sitting. Trilled quite vocal. Trilled very light,

## Langana estimates:

Wayne (1973)

Early 50's: 21-23 pairs

Stability: 1915 - mid 1950's.

1968-1984: No. of fledged young:

lowest for entire island: 4

highest " " : 19-20.

If nest has 3-4 chicks in a given year, odds are

57%, nest will be there next year; If nest 1-2 young,

odds 77% your nest will be there next year. eg. Parents will be alive

"Sealions have gone to hell."

Offshoot:

Commitment of adults to produce highest quality young,  
whether 1-2, or 3-4. It means adults work harder.

Tundra - asynchronous hatch -

- young "sacrificed" as needed; that is, younger ones starve.

Anatomy:

- either none, or all survive.

Peak production: ave & breeding span: 3-4 years. (3).

1980's: good production of young:

1970's: best year 13 young

1980's: worst year: 13 young.

Further decline of falcons mid-60's on Langana, from 7-9 to  $\approx 5$  pairs.

- The Murrelet decline mirrored by falcon decline 1950's  $\rightarrow$  1968; but  
did not follow Murrelet decline after 1968. Langana may  
always have 4-5 peregrines, even if Murrelets disappear all  
together.

- 50,400 ancient Murrelet equivalents = 1 falcon territory.

6 June 1990

his head looks bleached, with lighter areas on feather tips of <sup>- esp. left malar</sup> malar, above cere + eyebrows. His bluing is rather faded. The white of behind the malar comes all the way up to his ear, and fades into his eye (looks tundra-ish). Breast has long horizontal bars of flanks - look like shields, central belly has shorter bars - nearly flecks - also dirty, soiled or real salmon fleck on belly. Bib has thin vertical strips on feather rachis. The falcon presents a completely different appearance - well groomed. She is dark, bluing nearly blackish sheen, strikes malar well defined on face, bid of vertical streaks + belly + flanks of horizontal bars that look more uniform, no clear demarcation between flanks + belly. Cool, she has big feet. Wayne says same pair as last year.

Falcon has no bands. The both have hearts that appear very white, not creamy. Tiercel has faded cere, yellow feet. Falcon has yellow cere, feet. Falcon also has lighter cap feathers above cere. And, some black rachis etching in white, <sup>esp</sup> patch behind the malar stripe. Neat - could see tip of tiercel wings extend ~ 1 cm beyond tail tip. Tiercel has high & noise, falcon very low, raspy hek-hek/hek.

Found wing bones + primaries of dead falcon - imm. on one knoll. Then moved to exrie: located on shelf beneath snag, grassy, overgrown. 4 young! You can get to the exrie by climbing thru some roots. Shelf area about 5' long, but bending around + under snag + stump. One can also walk out along grassy ledge in front of exrie

→ 1794 Juan Perez discovered 19:00  
Lanana Light station. First  
landfall zw. N. Calif. & Alaska.

6 June 1990

and peer in. Wayne retrieved 3 young, and I got the fourth. All from banded 7 green band on left leg and silver band on rt. leg. 3 ♀♀, 1 ♂ ca. 25 days old. (♀♀ fledged 43 d; ♂♂ 41 d). Also ~~retrieved~~ picked out 39 Ancient Murrelets, 3 Cassin's Auklet + 1 Fork-tailed Storm Petrel from eyrie. Also took blood samples from each chick by toe clipping. (end of claw, that is). Finished with falcons and returned to boat @ 1800. Ad. tiered still screaming. It's been at it all day.

Then we continued N + W around Langara I. as we departed McPherson Point we heard + then saw an Ancient Murrelet chick in the kelp. It swam back to the rocks - striking black + white pattern. We hurried over for a look. Wayne noticed it by its 3schew-3schew-3schew warbling note (versus, as they descend to water they give a 3wweep-3wweep-3wweep call). Bad timing for the chick to be out in broad daylight. Must have gotten stuck in log jaws on way out at night.

Wayne thinks if it could make it out to sea for a mile, its parents might recognize its call.

We checked cliffs between <sup>also checked for falcons, but none seen</sup> ~~Telegraph~~ Post + Langara

Light Station where we found a single ad. falcon, on a snag. We motored in, scared it off, but it only flew a short distance, to land in a tree. We watched it for about 10 min, then decided to land me to see if it would become defensive. As we decided to do that, it disappeared (19:15). Then on to Langara Light-

Radar Post

Between Radar Post +  
Langara Light

Langara Light





6 June 1990

where we motored in to the left to sound for falcons. Could not scare any up with hand clapping. But, we did note other seabirds there. On the rocky promontory E of station about 15 pair of GWCs on territory, maybe a couple of which were incubating. Then, on main cliffs in front of station, about 25 more pair (some incubating  $\pm 4$ ?) and a few copulating, and on rocks W of station another 6-10 pair. Add in about 10 more individual looper pair, and we have an estimate of  $\pm 60$  pair of GWC's on territory, but most of which are not yet incubating. Probably another 15 imm. + subadults and ~~30~~ 40-50 ad. loafers on rocks at shoreline (GWC's). also counted  $\sim 60$  ~~to~~ loafing Pelagic Cormorants, of which  $\frac{1}{2}$  were imm. One pelagic on nest in falcon left. And roughly 15 sub-ad. Black-legged Kittiwakes on rocks below Lightstation. The crows seem to keep a watchful eye on the gull colony, and a Bald Eagle flew over it causing great alarm in the gulls. Somehow I wonder if these gulls get any young off! After the Lightstation we continued around to <sup>Radar</sup>~~Telegraph~~ Point, where we observed two adult falcons in residence. Then we went to Fury Bay West, no birds, Fury Bay Mid no birds (but Wayne says they are always here) and Fury Bay East. In for camp at 21:00.

Radar  
Point

Fury Bay  
Mid



7 June 1990

Up at 0700. Birds heard around cabin: Chestnut-backed Chickadee, Yellow-bellied Sapsucker, Bald Eagle, some sort of Warbler (Orange-crowned?), and Golden-crowned Kinglet. 10:04 departed ferry bay, headed for Cox Island. Landed on NE beach, just N of large reef area. Hiked to SE end of I., near the large Window Pinnacle. Saw 2 ad. Bald Eagles fly about the Pinnacle. One of the eagles had a raspy, hoarse, guttural honk or call, the likes of which Wayne had never heard, nor I. One ad. Bald settled on top of the pinnacle. They had nested on it before in the past (81'?). We positioned ourselves in a knoll w/ a view of the SE-facing gully, just S of the main E face of Cox I. Watching @ 11:05. Heard falcon call intermittently, but it isn't obvious where she is sitting. On our way thru the woods to our obs. spot we heard singing Swainson's & Hermit Thrushes, Winter Wren, ~~Tree~~ Chestnut-backed Chickadee, Crow. 11:40 Wayne spotted one falcon in gully @ top of tree, mostly hidden by branches. Song Sparrow song. 11:50 We changed position to get a better view of the gully. As I moved down to Wayne's spot I saw the falcon fly across the gully and disappear to the W. 12:02 - We moved back up to higher vantage. Wayne spotted a falcon in tree on W end, but E face of the SE gully. I moved up - spotted it too. Tiercel ad.; not the tiercel from last year. Last year the "invashed marauder" had been

Cox  
I.



June 7, 1990

in residence for 7 years, he & mate did not have young last year. This tiercel is dark & well-defined malar, looks almost black; his white ear patch (behind malar) is clean, except that a "Two-footed boot" of cup color (lighter than head & malar) protrudes down into ear patch such that some small white patches are visible on either side of head, almost at the nape. Wayne says this is very unusual. The tiercel has light band just above the cere, and vent demarcation zw. clean bill & breast/flanks flecking. Flanks & belly flecking rather uniform. Slight pinkish to belly feathers - making an V between flank (thigh) patches. Dark yellow feet, lighter yellow cere, faded eye lids. We can still hear ~~occasional~~ occasional scream of another falcon. 12:25 Tiercel preening. He's had left leg tucked all the time. His nape, also has light V of whitish feathers. Quite distinctive. Wayne says this Cox I. eyrie hasn't produced chicks in last 3 years - although it has changed 2 ft's 1 3 yrs ago, 1 2 yrs ago (Mrs. ~~name~~ Marauder).

Bushed for lunch at 1300. Sat on log overlooking Cloak Bay. Saw 1 river otter in bay. Hiked/Climbed up E face of Cox I., using some of the ropes Bristol had put in in '86 for his filming of the falcons. 14:15 - On top of SE end of Cox I., essentially near SE gully where we had seen the falcons earlier today. The Bald Eagles have a nest on top of the Blivlow Pinnacle. The nest is on top of the grass at top



June 7, 1990

of the pinnacle: it looks like only one end of nest consists of sticks, the rest blends into the grassy knoll.

The ad. ♀ is either incubating or shading a chick - she's flat out on the nest. Ad. ♂ on other, smaller pinnacle nearby. Great view of the nest.

at 14:15 we heard heh-heh-heh of an irate falcon, ~~maybe~~ coming from the big E face of Cox I. Wayne located the tiercel, on a tree on ~~the~~<sup>E</sup> end of SE gully, facing W-SW. Quite close. 14:30 - it definitely looks like the Bald Eagle is shading/brooding a chick. We've had mixed clouds/sun all day, with some light showers. 14:35 - the eagle stood up in the nest, just a bit, to then look down into the nest. It pecked at something in the bowl several times, bill opening & closing could be seen. 14:39 - 14:50 - eagle mostly half-drooped over nest, somewhat on haunches, wings drooped a bit out to the sides, very alert looking, often staring in <sup>our</sup>staring in my direction. During 14:15 - 15:00 Wayne watched the tiercel Peregrine, it was in close of on SE side of gully, then after long while flew to SW side of gully, sat. Another peregrine flew over high, the tiercel saw it, launched off; the ~~fast~~ incoming falcon flew thru gully, the tiercel whipped off and around after it, going round the W end of Cox I., no vocalizations at all. We proceeded up to ~~the~~ and down along the W end of SW gully. Wayne showed me the crest of ledge leading down to the grass-ledge eyrie site, then a courtship ledge at very end





7 June 1990

of SW spine, then another eyrie site just below an overhang. We could scramble over roots and step down onto ledge - wide, 6-7' long. A scrape was present in soft, moss-peat floor of ledge. The scrape was positioned out from back of ledge, such that it was nearly in line with edge of overhang. Beautiful spot. No birds. Then we watched the Bald Eagle nest - good view, and saw ad ♀ feed (16:00) small chicks to a very small eaglet.

She was very dainty with the chick. Good view of eagle nest from ~~the~~ top of W face of SW gully. We found one Pelagic Cormorant egg and some feathers of a Plover (?) Golden, Black-bellied, in forest atop Cox. We then walked over to other two eyrie sites, on N gully of Cox (this area looks out upon the reef area to the NE and has a clear view of the 4th Pinnacle to the N, and 3rd Pinnacle, to the E-NE. Each eyrie site was on E and W ~~for~~ ends of N gully, somewhat facing each other. Wagner's blind for his thesis work was on W end, looking at E end. Both eyrie ledges were crawl-ins. Wide, flat shelves, mossy, beneath or around behind snag & roots. Easy travel from ledge to other areas for chicks, etc. We found 4 fresh cormorant eggs on top of log in forest. On way out we found another cormorant egg in forest. Saw 1 gull nest + 4 Pelagic Cormorant nests on main W side pinnacle (twain-trees on top). Winter wrens on top of Cox I - one seen carrying



7 June 1990

food in bill. Also found yet another Pelagic Cormorant egg. All eggs found today, except for the first cormorant egg, are really fresh. We hiked/climbed back down the trail off the top of Cox I. On back at 17:50.

Decided to go back to original obs. posts on small pinnacles SE of SE gully, and watch for Peregrines.

18:00 - at observation posts. 18:13 heard legging scream and "shakey-voice" call (similar to a courtship kestrel's call).

Wayne said this call usually given in flight. 18:15-

Suddenly tiercel appeared in gully, landed high on ledge below tangle of roots (where the ledge with the scrape was)?

He started screaming, then went into an eechup-eechup, launched off the ledge when we saw another falcon high

over Cox I. heading E. The tiercel resident appeared

to give chase, at another tiercel. Both climbed and flew out first in direction of Iphigenia, then turned

W out over strait, in direction of Fung Bay. Resident tiercel below & behind, gave a couple power climbs followed

by nearly horizontal stops. The resident tiercel stayed pretty much

below & behind, but when out 1 m. he was ahead and below the intruder, gained height, turned and stooped at

intruder, then intruder also stooped, and they curved. At

which point resident tiercel turned to return to Cox I. He

did one more power up & horizontal stop. Intruder kept

going towards Rhock's Pt. Wayne said residents often

do power climbs & stop as display, and, if they're really

paired, they'll eechup-eechup just before. The resident



7 June 1990

Tiercel came in to W end of Cox I low, out of sight. Right after that we saw the falcon (♀) sitting high in the prominent snag of SE gully. Definitely a different bird - very marked breast, flank marking, thick horizontal bars, and vertical tear-drops even up into bill, nearly to throat & under. The malar was quite thick, and there was a hint of a white patch on nape. The ear patch looked smaller than the tiercel's, and I think this falcon had more of a "hood" than the resident tiercel. In any case, she looked big & dark, with markings all up the breast. In fact, at first I thought she was an imm. In looking at Wayne's reference photo, we concluded that this is a new ♀. So, both adults at Cox I. are new this year. At the beach we decided to go over to Iphigenia Pt. and check out the cliff from the west. Arrived there at 20:00, to immediately see the falcon fly out to topped tree snag, hah-hah-hahing, with food in foot. She ♀ plucked the prey for ca. 1-2 min, then flew right back to the eyrie ledge! She walked into the ledge, and hunkered down - appearing to feed young. This lasted ~ 15 min., then she flew out & landed on pinnacle in front. About 20:30 the Tiercel appeared, landed in snag high on cliff. About 15 min later he disappeared going W, returned 20:45 w/ prey, corkeremmed over pinnacle ♀, landed on cache shelf of pinnacle, ate, ran around abit, then flew to moss ledge on E cliff. At 21:15 we left, saw falcon sitting on pinnacle. Rain.

2

2

2

June 8, 1990

Up at 07:30. Saw deer down on beach near the creek, plus a few Harlequin Ducks. Swainson's Thrush singing. Wayne heard the call of a Red-throated Loon flying over cabin, and last night we heard what might have heard the call of Marbled Murrelet flying over about 23:00 (still light out). Also, yesterday on Cook Bay we saw Red-throated Loon. Anyway, left camp

Fury Bay  
middle

at 09:45, walking W to the epic site at Fury Bay middle. Low tide @ 09:00. Wayne showed me his old blind set out on Fury Bay East (1969). He had set up blind at one location where ads. had scraped, this forced adults to move to another location, where they laid 2 eggs. Wayne took one egg for CWS, the birds moved to a 3rd location, where they laid 3 eggs. 1 egg disappeared, 1 egg hatched well, other chick died at hatching. 1 chick raised - his blind was only 13' away from scrape! We continued walking along beach/rock! cliff edges. Found an aviator's helmet, wood bench, gaff. Heard Winter Wrens, saw Townsend's Warbler. Arrived Fury Bay Middle at 11:15, so it took ~ 1.5 hours to walk here. Heard Western Flycatcher, Swainson's Thrush. Good SE winds, overcast.

11:50: Falco appeared from W, flew to East gully side. Dark, large, black male, grey feathers & over ear - so smaller white ear patch. Good breast markings - wide horizontal bars on flanks. Bk w/ vertical bars. 12:00 she heh-heled at Bald Eagle, flew at it, returned to a snag on E gully side. 12:05 she chased another eagle, returned to tree top

8



8 June 1990

very close to us, but she was well-blocked by branches. Head has wide light area above eye, some small flecks in white ear patch. I am struck by Peals' wide & long malars, plus fact that these crown & back colors don't show a lot of diff in shade. Malars & crown tend to show light flecking. Whole bird gives appearance of lighter slate-gray (vs. Calif., where birds appear slate-black). Lower flank feathers have wide horizontal bars (or flattened chevrons), perhaps  $\frac{1}{2}$  in wide, that become more straight and thin horizontal as you go up the breast. 12:38 - tiered shot in ~~front~~ from W, fulcom flew out, landed in close tree, tiered landed on snag. Fulcom's are faded yellow, feet yellower, but still pale. No bands on tiered. He looks "cleaner" - uniform back & head. Ear patch also slightly covered w/ light gray feathers at ear. 12:46 - Tiered launched off, went W, returned to a tree on E side gully. 12:50: off tree, rode wind in front of gully (wind ↑ greatly) back & forth in front of us, then moved up E gully side out of view. 12:50 - fulcom still in close tree. 13:10 - we came off high dr. port, back to rocky shore. At lunch, saw an eagle fly by, hen went out & chased it. We tried making noise, she came out to fly quietly over & around us. 13:50 - Landed on snag top. beat river. Peals' really have wide horizontal bars on flanks, becoming thinner as you go up. The breast, has tear-drop shaped flecks, well defined usually, and the belly has lighter horizontal bars, as on the flanks, but lighter. This falcon has more thin pencil-marks over most of bit. 14:15 - fulcom left snag soared around E gully, then back to land high in tree.



8 June 1990

on E side of gully. No sign of tiercel for quite a while, and no food either.

14:15 Tiercel took a shot at a Bald Eagle out W of gully  
tower, heh-hehking. 14:30 One of the peregrines making several

short fly-alongs in front of gully, returning to snag a tree

on E side of gully. 14:30-15:20: Watching gully. The hen has  
changed position a few times, usually returning to a snag or tree

on E side of gully. 16:00 - Still watching hen on snag. Light  
rain. 16:15 - Rain heavy, hen no longer visible. 16:15-18:00,

rain. 18:00 Hen visible on high tree east of gully. Seen  
out, she's drying out - preening, stretching, etc. Silver band

on left leg visible. 18:40 Winter Wren came out to rocky  
shore to forage in cracks in rocks. Pair of Song Sparrows doing

same. While watching hen Peals in snag - nice afternoon  
sun (18:45) - blue sky background - oh warmth again. Now

the Peals has a very "black & white" appearance - slate dark  
~~blue~~ black-grey back & crown/nape. White breast & bib, with  
only a hint of cream color on lower belly. A Peals' blackish  
slate gray is still not as black as a Calif Peregrine's.

Rather, it has a slight "musty", a "fulmar sheen" to it.

This ad. ♀ was here last year - also didn't raise young. This ♀  
has a pair of whitish spots on nape. 18:50 - Bald Eagle pair

on W end of M.d. - Fairy Bug launched out of over bay -

peregrine did not react. 21:00 - Falcon flew from ~~snag~~

summing ~~snag~~ perch on snag to trees on top of E end of gully.

21:30 We packed up and slowly made our way back  
to the cabin. In the area below the cliff of the



8 June 1990

Old Ferry Bay East Eyrice Wayne showed me a cave - we went in w/ flashlight. Really neat - the entrance to the cave is about 60' above sea level. The cave slopes down steeply - Wayne said he's found ~~hundreds~~ Ancient Murrelet chicks in it - they do not get back out. It leveled out after first 30', then goes back into cliffs about 120'. Smooth gunk on the floor of initial wide cavern, that then goes into a deeper cavern with a roof about 60' high. The cave then narrows to human width, and one needs to stoop as one goes - past large stalagmites & stalactites. Even the walls are coated with this same material as the cones: rather yellowish & limestone appearance. Floor of cave here has rounded rocks - as on beach. Under these rocks are many bones - some very brittle - of small birds, fish. Even fish scales. How old? Some bones new, some very old. We collected a few bones for ID, possible dating. Turned off light & listened to the darkness. Back out around 21:00. Continued E. At last cliff before cabin beach, we stopped at an old shellfish Indian midden tucked up & under a large overhang. Also found several peregrine feathers and saw specrement on walls way under overhang - a winter roost? Back to Cabin at 22:00. Deer, 16 Harlequin Ducks on beach. Also Varied Thrush. Also Pigeon Guillemots in rocks, & pair of GWC's on Dog's Head.

Q

18

2

Q

9 June 1990

Up at 07:30. 36 Harlequin Ducks on cabin beach, 1 deer.  
 Left camp 10:04. Ad. Bald in trees near Dog's Head. 1 pr.  
 CWC's, and 19 Pigeon Guillemots foraging. Stopped  
 at Langers Lodge - John + <sup>Terri</sup> ~~Fanny~~ Van Berkel - said hello.  
 Terry is going back to ~~the~~ Vancouver - they'll have a  
 child soon. Fishing is rather poor - loads of sand eel  
 boils & herring feeding on them, but few salmon. Most  
 catch bottom fish. Water temps up this year. Landed  
 at D'Isol Bay site 11:20. Heard wail of peregrine. Also  
 Raven crows. As we walked up from beach about P.  
 we saw

Mike Nielson  
 mng. Lang. Ldg.

Lodge owned by  
 Doctor





Effectively  
3' x 4'

22 + 23

We left the beach at Dibel Bay about 15:00, drove the zodiac E+S around to the strait between Langara & Lucy Is. Good View of Pillar Rock on Graham I. (in Pillar Bay) - a "Bechie" eagle. Seas were not too bad, no more white caps - just loads of waves going every which way, but it became very calm at the lodges. We stopped for a short while at Sphrageneia Pt., ~~to~~ saw after 5 min. one adult on a branch under crown of tree, <sup>as well as 4 high soaring birds in the sun!</sup> then proceeded W to Fairy Bay. We went first to Mid-Fairy Bay. Wayne wanted to get the male id'. We tied on to some kelp. Saw the falcon - I got out 16-Gauge and fired to see if we could scare up the tuxel. No such luck. So we went on W to

50,000 pairs of Ancient Murrelets (or similar) per pair of  
Pele's falcons.

B.C. Seabird colony inventory:

Report #1: East Coast Moresby I.

→ 1/50 birds banded show up as breeder on Tangara  
↓

NAFA 1963 Vol. 2 pgs 77-84

- SE Charlottes By F.L. Baile  
in 1962

June 9, 1990

Fury Bay W, fired, scared up Bald eagle. Went to White Spot cliff, (just E of Fury Bay W), fired. No response, but about 5 min. later we saw a tiercel Peregrine zip in a tree top level from the W - headed for Fury Bay Middle site. Wow! We boated over to Fury Bay Middle, landed on rocks in heavy swells. ~~Before~~ <sup>after</sup> landing we saw the tiercel fly to a snag right on the rock, the ad. falcon flew over to a ledge, screaming at him. This falcon ~~is about~~ is at least in her 6th breeding season. We landed, and after things were safe, saw that the falcon had moved back to a tree perch on E side of gully. A then saw the tiercel, and Wayne was able to id him - same bird as last year. So this is second year in a row that this pair failed. Falcon screamed at him a bit. He is very clean, light, gentle markings on breast & flanks, the flank marking bars almost lighter than upper breast & flank. Bill has fine penciling. Malar thick, with small line of gray going at angle off to nape, demarcating the ear patch. Gorgeous bird. Just before we were to leave, we saw the falcon go after an ad. Bald going E. She put in long hard stoop, may have touched its wing, tiercel followed right behind w/ an even harder stoop, causing the eagle to turn and drop down. He also might have whacked a wing. Falcon put in a second stoop also nearly hitting the eagle. By this time it was nearly beyond Fury Bay East. Both ad. peregrines returned to Fury Bay Mid. She was hung on screaming at him, too.

6/10/90

Radar Point tinned



Wide  
Malar

Couple darker boots, filled in  
with grayish flecking.

Less flecking anteriorly,  
clearer patch just behind malar, but  
w/ fine flecks.

Took 7 pictures horizontal &  
3-4 vertical

June 10, 1990

Out of bed at 07:30. Ravens on beach at creek. Left Calvin at 10:15, in boat. Overcast this morning, but clearing. Bald Eagle on Dog's Head, as well as a pair of CWG's. ~10 Harlequins. <sup>+ Oyster Catchers.</sup>  
<sup>+ whitecaps - a bit wet.</sup>  
 10-20 mph NW winds, and swells to 5' round Lacy Island at SW corner of Langara I. (that is, the area between South West side of Langara and the strait between Langara and Knox Point on Graham Island. It took us about 40 min to motor to a beach in the Lord's Bite - a flat expanse of reefs along W side of Langara, between SW corner and Radar Point. We are at a fine beach, loads of timber, and a cabin w/ real windows is up from the beach, in woods.

2<sup>nd</sup> Heard Oyster Catchers, begging Chickadees, Golden-crowned Vireos, Song Sparrows, and some type of warbler w/ a scratchy song - zee be dee zance zance zance deep dip. We will head N overland to an eyrie site at Radar Point. We just might have heard a flock of crossbills (Red?) at 11:30. We hiked thru moss-lined canyon and along beach to Radar Point - and an old WWII wooden road which leads out to it. From Radar Point Wayne said you can look NNW and see Forester Island in AK, but it was too hazy. Large ship going in to Prince Rupert. Big white caps & 20 mph wind. Saw 5 Bald Eagles and 6 crows on Radar Point. We hiked up the road about 10 min, then out to a gorge series of 2 gullies. Heard hooting of peregrines. From wall of first S gorge we didn't see eyrie chimneys at last year's eyrie, but behind <sup>remains</sup> etc. from Bristol's film were also seen. We then hiked to middle promontory between both gorges (and above last year's SW eyrie facing eyrie). Soot for



June 10, 1990

1.5 hours until 15:30. Wayne got ♀ I'd - same as last year, but the tiered flew in strong winds (≈ glided over our heads, often stationary) for the whole time. We found eagle site on well-grown shelf ca. 30' down on other SW facing side of gorge. At least 2 chicks inside, and they are younger than any others so far. This site had 1 chick in 1989. Falcon sat well-screwing, she made many close passes in gorge as Wayne went over side @ 16:00. I got good pictures of both ads. sitting. Tiered has wide malar, ear patch filled dorsally by light gray feathers and a couple darker flecks at rear of patch - one of which is large (the one in front of other). Light, irregular patch proceeds nearly up to level of upper mandible, and has a small finger in towards eye. But by a large ear patch is filled dorsally from nape down to about  $\frac{1}{2}$  length of malar stripe. (all left side description). Filled part of ear patch somewhat resembles Vietnam. He has two faint lighter patches between eye & ear on left side of head, one close to eye, one close to nostril. Right side similar, but less distinct. Almost no band of lighter feathers above ear. 3 chicks! All tiered! The adults seem to have both very raspy voices. Their heh-heh-heh seem to have a rasp to them. The falcon is a beautiful bird - very slate blue & white. She has lighter flecks both behind the ear patch and on the nape. Her band of light feathers above ear is also well pronounced. From the side her flanks & breast present an almost speck-like pattern - as the breast of a European Cuckoo. Her horizontal bands are thin and long on flanks. The wide flecking on her flanks go all the way up to her shoulders, and present a neat appearance across the breast & belly. Her bill has thick





June 10, 1990

Weights of Radar  
Pt. Terebels.

535 G

570 G

615 G

(-50 G for  
log)

flecks ~~more~~ lower down, and thinner ones up towards throat. God,  
five gotten great views of her on a snag 60' away. No bands.  
Could even see the brown of her ~~part~~ irides in the sun. No  
bands on tunic ad. either. Prey at eyrie: 1 Mottled Murrelet  
+ 5 Ancient Murrelets. Chicks approx. 14 days old. We left  
the eyrie at about 21:00 - so we spent ca. 5 hours at  
the Radar Point Eyrie. Went back to Wooden Road, rested.  
Heard Rufous-Hummingbird zip by (also recall seeing a Rufous  
Hummer at Cox Island on 6-7-90). On walk back to  
Beach in Lord's Bight we heard Hermit Thrushes singing - I  
had also seen one at the Calm on Lord's Bight. Arrived at  
boat 21:56. Saw ad. Bald & ad. GWC. Left Calm  
beach in zodiac, headed out into the NW wind & waves.  
The waves were in many directions, but mostly probably out  
of NW & W. But there weren't as many whitecaps as  
the way out. Saw pair of GWC's on Dog's Head, +  
3 Red-throated Loons. Oh, also saw 3 oystercatchers &  
2 Bald Eagles in Lord's Bight. The GWC's on Dog's  
Head - ♀ is ad; ♂ has gray on all rectrices.

June 11, 1990

Low Tide 10:20

High: 17:00

Heard funny whump-whump at 05:45 this morning. We  
got up to check, but didn't see anything. Weather out of SW-W,  
overcast, rainy. Hearing 2 warblers this morning - one  
with a fluty voice - wheedle wheedle wheedle wheedle ~~tip tip~~  
rather even first notes, last 2 <sup>lower</sup> in pitch - Townsend's Warbler.  
And another w/ buzzy, rapid notes, followed by 2 higher quick  
notes → Wilson's Warbler. Drove boat out into Fairy Bay -



June 11, 1990

good swells, SW wind. 25 Harlequins out on bay. Road boat over to Languara Lodge, beached behind Lodge. Saw close-up of 2 imm Bald Eagles. Varied Thrush singing in background. <sup>Left Lodge on foot at 12:00</sup> Hiked thru blowdown and bitches of undergrowth to a position just E of Iphigenia eyrie site. Rain, cold wind. Could see 3 (?) downy chicks in eyrie. Arrived at obs. site at ~~15:00~~ 14:30. Then had to sit out rain for an 1 1/4 hrs. Then hiked around gorge to top of eyrie area. 16:00. (Saw imm. begging Winter Wrens, heard Western Flycatchers and saw a Swainson's Thrush? on hike from Languara Lodge to Iphigenia. Also, as we arrived at Lodge we had heard a wailing penguin-floater? Now at Iphigenia - can hear belching adults - at every passing Bald Eagle. Sounds like an adult tufted is screaming at us on top of rock. Watching ad. falcon on snag across the gorge from us. Beautiful angle, lighting. Thick molting, hood filled in to level w/ upper mandible. Clean ventral portion of ear patch, slight crest protrudes into ear patch from nape. Think flank markings up to sternal shoulder, belly w/ thick tear drops (so breast is not as gossamer as the Radar Point bird). Bill w/ thick tear drop ~~on~~ <sup>on</sup> ~~flashes~~ <sup>flashes</sup>. Beautiful view of her right side - oblique breast. Pale yellow feet, paler are. No crown or nape uniform. Forehead has irregular lighter patches. We both climbed down the rope, Wayne ahead of me, along a salad-covered shaft to the eyrie ledge below. A beautiful site! 3 downy chicks, approx. ~~12 days old~~ <sup>13 days old</sup>. 13 days old, 2 ♂♂; 1 ♀. The ledge is about 3' x 6' rectangular, with

Chicks:

88 5556



June 11, 1990

a nice scrape in dusty soil, and a small branch at the eagle's lips. Nice view of the pinnacle in front, and across the strait to Graham Island. Wayne landed (silver right, green left) the chicks, too clipped. The hen falcon screamed most the time, as did the chicks. She made occasional nice, close passes at us. I got good pictures of her in a mag. Tired showed up just as we started down, but then disappeared. I did not see him until 1 hour later. He kept his distance on opposite side of gorge. We hand-over-handled the rope back up on top at 18:30. Wayne watched for the ternel, got a few pictures, then we packed up & left at 19:00. Long hike back to beach at Langanza Lodge. Arrived 20:30. By the time we had the boat loaded and had talked to the lodge people, it must have been 21:15. We rode the zodiac W to just W of Eury Bay, into high swells (3 m). At least wind had calmed down, and it wasn't raining. Still, rough waves going every which way. We wanted to look for ancient Murrelets. ~~5~~ Found a group of 8 and a couple loners about 1 mi. S of the White Spot Cliff on shore of Eury Bay at about 22:00. We chased them around and I took some photos. One ad. gave a characteristic call when he was separated from the others. Beautiful little seabirds. As we entered Dog's Head 3 ad Gulls were on it. Hit the beach in swells at 22:30. Oh yes - we saw several Marbled Murrelets in half spring / winter plumage (white bellies). The *Sphingaria* pair appears to be same falcon, but now ternel.



June 12, 1990

Up late today 08:00. Slow going this morning, but at least it is clear & sunny. We loaded up the boat. I heard definite Wilson's Warblers & Varied Thrushes this morning, plus one usual Townsend's Warbler. We listened to radio broadcast - NW winds to 30 mph predicted. Oh well. We left bay, headed W and around Lacey Island along W coast of Largura N to ~~a~~ the Raden Point, and then the Light Station, at NW end of island. Saw one group of 4 Ancient Murrelets, several groups 1-3 Rhino Auklets (some in breeding), several groups of Tufted Puffins (one flock of 6), and a feeding group of Pelagics, GWC's & couple Black-legged Kittiwakes. In all ~ 20 Rhinos, 15 Tufted Puffins. On landing 12:35. We walked from landing (where loan, shed & boat are located) up a wooden road - in direction of Light Station. We walked about 12 min, saw ad. falcon fly over. Then we went to a lunch observation spot, could see one falcon (ad.) cliff soaring back & forth over gully. After lunch we moved up road to blind (obs site) directly across gully from eggs & eggs. Could see great flying view of ad ♀. Then, in blind, both adults and one eggs in small "cave" formed by overhanging roots at top of gully - facing SE. Beautiful views of both adults - both have good molts & hints of "hoods". The falcon is strongly marked with wide flank marks and thick breast/belly spots. She looks heavily spotted on breast. Bill has pencil markings too. Tarsal is very fine on breast, very thin markings, quite clean. I also just got a pair of GWC's IV,

Warren & Elaine Kennedy



June 12, 1990.

which are nest building in grass at base of gully. Very light birds -  
100 tips nearly = mantle. Dark pink eyerings, and thickly  
pigmented eye rings. Saw one warbling feed 4/6" sand lances.

Wayne has ID both the Peregrines and determined that they  
are the same pair as last year. The falcon is banded, with  
a silver band it, and a green band left. She came from  
Ferry Bay eyrie 4 years ago. Quite nice! It was approaching  
15:30, so we decided to get on with the work. We hiked  
~~to back to the road~~ along the wood road to a trail  
that led around the gully. More crawling & climbing over &  
under brush. Wayne went on to the eyrie, & went below  
to the rock shore to categorize gulls. Found 6 pairs of  
GLG's to ID. These birds are on the headlands just  
E of the light station and W of the falcon gully. While  
ID'ing gulls I could hear the raspy belching of the ad.  
peregrines, and occasionally saw them hanging on the wind  
above us. Saw a fair number of loafing Herring Gulls and  
one Western Gull. met Wayne back at the trail at 17:10,  
after I had gotten lost in underbrush. We went to the  
Light Station. Well kept, neat, met Warren & Elaine  
Kennedy (+ daughter Chentrel, son. } (3rd kid on  
the way in Sept). We stayed for a great dinner. Then  
tried ID'ing gulls below the station proper. About 5 were seen,  
but light was getting poor. Beautiful view over Dixon  
Entrance - clouds scattered, sun sinking down, strong winds.  
Just gorgeous. Wayne & I went back to the boat landing  
to get some things. Stopped at the bench to watch the

Warren & Elaine Kennedy - Chantel & Ryan + (Tyler or Amber)

Langara Light station

% Canadian Coastguard

Bag 3670

Prince Rupert BC

V8 J 3R1

Beebe - Napa Journal #2 (1963)

77-84

South Eastern Charlottes - 1962

Blood, PA 1968 Pop. status of peregrines in QCI Can Field Nat

C. B. de - Green 1913 Notes on the dist Peals Falcon

Ibis 473-479.

June 12, 1990

falcons. The falcon sat on stump above the single chick (a ♀), and hekked at us. The tiercel rode the wind above us, making long arcing stops & ~~throwing~~ throwing up into the wind over the hill behind the eyrie. He went up nearly as high as his starting point. He cut a beautiful silhouette against a gray/pink evening sky. Birds seen along road: Winter Wrens (w/ young), Hermit Thrushes (✓ food for young), Orange-crowned Warblers (w/ ~~young~~ begging young). At Light Station we saw robins on the lawn. Talked with Warren and Elaine until 29:30; finally got to bed at 01:00. ~~at~~ Slept in the spare house at the station, wow, warmth, a great dinner & shower.

June 13, 1990

Up at 07:15. Had great Breakfast w/ Warren & Elaine. Then went to the gull colony on rocks below the light station (Langara Light), id' gull types for 10 pairs, then <sup>2/2</sup> collected 2 gulls on 2 shots (lost a 3rd bird in surf). DAB 713 & 714. The third bird was the mate of 713, shot with 713 on one shot. He flew out over the surf and then collapsed, crashing into the rough surf dead. The pair had been on a 3-clutch nest. Weather was sunny & windy today out at the Light. I went back to the station, said goodbyes to Elaine, then walked down the road to meet Wayne who was at the obs. bench showing Warren & the kids the eyrie. We had a good view of the adult falcon and her chick. She flew

| 1968   | 1969 |
|--|------|
| 1 Skedans Point (Skedans Is)   |      |
| 2 Low I  | 1    |
| 3. Reet I NE   | 2    |
| 4. Reet I SW   | 3    |
| 5. Vertical Point<br>(+Limestone Is).  | 4.   |
| 6. Pass Pt /W of I.7 + N<br>of Haswell I/Kingsway Rock<br>(also S of Nelson Pt - @ Selwyn Inlet) |      |
| 7 Helmet I (E Laskeek Bay)   | (5.) |
| 8. Titul I   | 6    |
| 9. Tsinga Pt (s)<br>(S Dodge Pt)   | 7.   |
| 10. Fuller Pt  | 12.  |
| 11. Tar Islands (mid)  |      |
| 12. Agglomerate I. (mid, E)  |      |
| 13. Murchison I. NE Pt   | 9.   |
| 14. Faraday I (SW)   | 8.   |
| 15. Ramsay I SE  | 11   |
| 16 Ramsay I, Cronk's Pt  | 10   |
| NW Univ. I. Cox 1  |      |
| Laaz 2   |      |
| N Hansen Bay 1   |      |
| San Josef Bay N 1  |      |

13 June 1990

about the gorge & down out over water, then came back & landed on stump above chick, looking at us. After 10 min. we left the observation stump and went down to the landing. Struggled to get all the gear and boat in the water - good swells, tide lower. Noticed we were filling w/ water as we sat around in the boat. Headed east along N shore of Langara. Fired off some shots in a couple inlets to check for peregrines. Eagles scared up in the inlet E of Langara Light Station. Then we got to the inlet @ Sea Lion Rocks. Fired off a shot - to scare up one falcon - looked like a tiercel. Thought we might try landing at an inlet E of this spot, but the low tide was not good. Since we were filling up so fast, we decided to keep going around E end to get back to the cabin in Fury Bay. Met John (of Lang. Lodge) in strait between Langara & Lucy Is. He gave us some sandwiches, so we really had great lunch (plus the lunch the Light station people gave us. Got back in rough SW winds to the cabin about 15:30. Wayne fixed ~~the~~ a tear in the boat while I worked on the 2 gull specimens.

1968

17. Huxley I. nr Monument Pt. - N

18. Huxley I nr W point.

Howay I

19. Ikeda Pt

20. Langtry I

21. Lyman Pt (N)

22. At Treat Bay

23 " "

24 Howe Bay

25. S of Bowles Pt 2 mi

S of Barber Pt 5 mi

Kerouard I

26. Anthony I - SW

27. Skelton Pt

28-30 Hippa I

31. nr Hughes Pt

32. N, Notch Pt

33 nr Barry I

14 June 1990

Up at 06:30. Ravens ate my gull remains from yesterday. Heard Townsend's Warblers + Swainson's Thrush in forest. We were out in the boat by 09:15. Stopped at lodge to call the charter. Then saw 4 Balds in Hensley Bay. Met Wayne's friend, Mike Pearson, in fishing boat on channel. Rounding McPherson Point we came upon a feeding boil of Herring. Up to 7 different Bald Eagles were coming out + making hunting attempts. They would come in low + try to grab fish several times on a pass thru the boil (up to 8 attempts). Saw several successful grabs, and one eagle pirate another, neat manoeuvres, so that the one bird dropped its fish and the other caught it, after a short twisting dive of 20 feet. We continued around McPherson Point (heard ad. falcon hawking at a Bald Eagle as we sat in boat watching the feeding boil). We landed at the inlet where we had spotted falcons yesterday and earlier in the week. This inlet has some nice moss-covered gorges, and is just South of the west end of Sea Lion Rocks, on N coast of Langara, approx. equidistant between the McPherson eyrie and the Langara Light Station eyrie. We were able to land on rocky beach (small) at outgoing tide at 11:15. Immediately heard a tiercel e-chipping, and saw a falcon screaming her hunger wail. We were able to hike up slowly, found feathers + plucking perches/ledges everywhere - gives one a feeling of a large falcon "playpen." Some ledges had good amounts of Murrelet feathers. We





June 14, 1990

found one beautiful ledge, w/ scrape and a falcon back feather, ~~on top~~ beneath a large root and downed tree at the top of a middle ridge (of 3) in the inlet. Great moss-covered mound in front. Scrape on ledge faces W-NW. Also saw Brown Treecreeper; and we heard an chipping tereel, saw him skirt across sky in front of inlet - e-chipping to drive off intruder? Is this a floater pair? Heard Red Crossbills. We made our way back to the boat at the beach at 12:30. Sat on rocks in rain, to eat lunch & watch for peregrines. Heard one mail as soon as we sat down; ~~th~~ after 1.5 hours, the tide was nearly taking our beach away, so we decided to fire off another shot. I fired into the water, and about 30 sec. later we saw a falcon (tereel) quietly zip out of the gorge and round the trees, headed E. We packed up the boat, and decided to head E around the island. Lots of drizzle, wet conditions. But the ~~seas~~ <sup>seas</sup> are calmer on the E side. Lots of lodge boats are ~~about~~ bobbing about the E side, as are the halibut boats (season started yesterday). We rounded Henslow Bay and motored to Aphrogenia Point. Good swell & chop coming in from the W, but the rain lulled, so I decided to collect some gulls. There was a pair on the rocks near pinnacles #1, that was soon joined by a third adult GWC. We slowly made our way over to them. The waves were pretty regular, and rain was threatening. I managed to

# Bulletin 180

Pilchard → Pacific Sardine Sardinops sagax

B.C

1941-1945 123.2 million pounds

1946-50 4.5 " "

pg 100-103 Canadian fishing failures in 1933 & 1939 w/ landings less than 1.1 million pounds result of fish not being found → changed migration routes?  
Decline in yield beginning in 44 reflects reduction in supply of fish. → Lack of successful reproduction due to Δ in seawater circulation

## Pacific Fishes of Canada

J. L. ~~Hart~~ Hart

Fisheries Research Board of Canada

Ottawa 1973

June 14, 1990

collect all three birds on 5 shots, missed twice at close range. We then headed for the colony on Cox Island, and I shot a fourth bird that had come off the W rocks to investigate the other 3 birds in the zodiac. (One of the original 3 birds, which I had missed, went right over to a rock, and sat there. It didn't look wounded, but it stayed put while we waited below it. Finally we scared it up, then I got it on a long shot → beautiful). In all, OAB 715-718.

All these 4 gulls originated from the Cox Island colony. After getting the birds, we motored around Cox Island into Cloak Bay, where we tossed one of the previous day's gulls into the water near the Window Pinnacle to see if a Bull Eagle would go for it. One eagle did come over to check it out, as did another gull. Somehow the eagle then turned on the gull, and made a series of serious attempts to get it. The gull realized this and began flying in earnest to vacate this side of Cloak Bay. The eagle came quite close on a couple dives, but the gull got away. We enjoyed a rough ride and pouring rain back to the cabin at Fairy Bay. By the time we got the boat up on the beach and our equipment stowed, it was 17:00. I did the gulls, including a skin, under a plastic tarp of our cabin. Got to bed about 23:00.

4 birds / 6 shots



June 15, 1990

Went at 5:30. Fine weather, no real rain, pretty clear skies. We pushed everything up, taking several hours. Light rain came around. The Ravens had pushed my gold carabiner down. I had left them on the beach. Not even Lunge or Lunge were left in the collection. We had enough gear for two trips in the plane to Lunge. We were took the first and then came back to pick me & other gear up. Had to round a distance small (> 3 miles), but still not too bad. Both pairs of (W. I. L. and Lunge) & Lunge's Point were in territories. Looks like Lunge was first and was incubating. We looked at the ledge (many seen several Murrelets & 8 Tuffed Puffins on way past the ledge (yes - yesterday I counted 40 Puffins on ledge). Decided, because of wind, to just wait out our plane at the ledge. Had a beautiful view. Got a view of the ledge, its good landmarks & had coffee. Oh - warmth! Our plane, our old plane, didn't come until 17:15. Old pilot, cavity fellow. Because of wind & waves we had to take all the way past the both island camp & then start between Lunge & Lunge. Plane was surprisingly stable in waves. We took off, got tremendous view of L. Graham Island thru clouds, rain. Pelican Rock and



15 June 1990

Norden Harbor more quiet than. Town Hall, NE of Nassett, stood out like a magnet, with a piece of sunshine shining on it. Great plane rock & landing in water at Nassett. ~~Arrived~~ ~~the place~~ ~~at~~ I unloaded our stuff while Wayne paid for the flight. Then we piled it into the car, had a quick & cheap burger (typical Wayne) and he drove me to visit a Michael Brown's house in Till. They have a tiny place just south of the Auburn Pub headquarters. Janet & Michael put up a tent ~~for~~ for me in their yard.

16 June 1990

Up at 08.30, after a long night. The day, much overcast. We decided to go for a short hike over the 'flycatcher trail', which starts from the highway N of the Till River bridge. Short drive, then hike through wet cedar woods, then along a trail through mixed hemlock/ spruce forest. Beautiful moss forest floor. We heard Townsend's Solitaires and mostly Wilson's Warblers & saw Varied Thrush, Townsend's, Varied Thrush, Hairy Woodpecker. We came out after about 1.5 km on the S bank of the Till River, at about where the Till River House Lodge is located. We continued along the Till River, headed E to its mouth. Just a few cedars. Common Mergansers, Ravens,





16 June 1990

Scrubland, belted Linghish forest in sand  
dune, Red-breasted ~~sp~~ *tyrochus* (1st nest in grass &  
leaving young there). When we hit the beach  
we turned north for a few km's. Nice day, cool  
view of an occasional eagle. Went beyond the  
creek of the Pacific to a creek about 4 km  
S of Cape Hill. Heard back then the doves - lots  
of winter doves, Red-breasted *tyrochus*, then -  
increased Linghish, some Thrush in the forest  
patches behind the ~~dove~~ doves. Raven family  
5 in dishies feeding, as well as juncos, on a mass  
of winter forest. We turned back to the Tall River.  
headed to look to the phytoplankton trail. We found  
an egg, about 4 cm long, (= more shaped), with  
about 1/3 of its shell gone. I clean egg, probably  
placed there by a crow. The egg was in a mass,  
up to the trail, about 125 km downstream from  
the Tall River Bridge, in a sparse/brush forest.  
This trail follows the spine of a forest-covered ridge,  
set back from the N side of the Tall River,  
in Northern National Park. The egg is light  
green in base color, with minute, soft brownish  
and blackish flecks. Could it be a Streaked  
Murrelet egg? ~~For~~ For dinner we had a 4 lb.  
lake salmon, that Langara Lodge had given me.  
We went to the River Lodge for dinner - saw a  
immense "magnum" with 9 3 week old chicks, on



16 June 1990

the river. Also saw a River Shearwater.

17 June 1990

Janet & Michael drove me to the museum in Skidgate, then we went to Sandspit, where they dropped me off. I took a bus to a point south of the town to a rocky beach along Skidgate Inlet. Four number of Gulls on the inlet, visible, breeding on the small rock (20 m) just N of Sandspit. Saw Western Gulls, and saw an eagle swimming in the inlet. It ~~was~~ actually swam with its wings, making good progress getting to shore. I estimated it swam about 20 yards, then up on a rock from the shore, shake itself, and fly off.

18 June 1990

Flight out of Sandspit at 11:45 to Vancouver.



